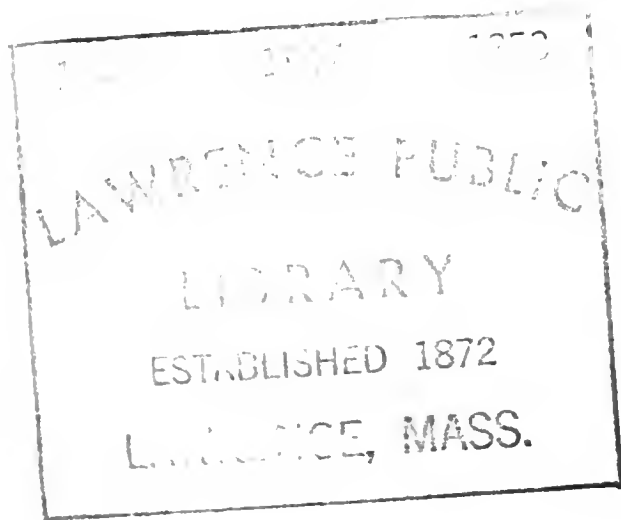




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SEPTEMBER AND DECEMBER, 1866.

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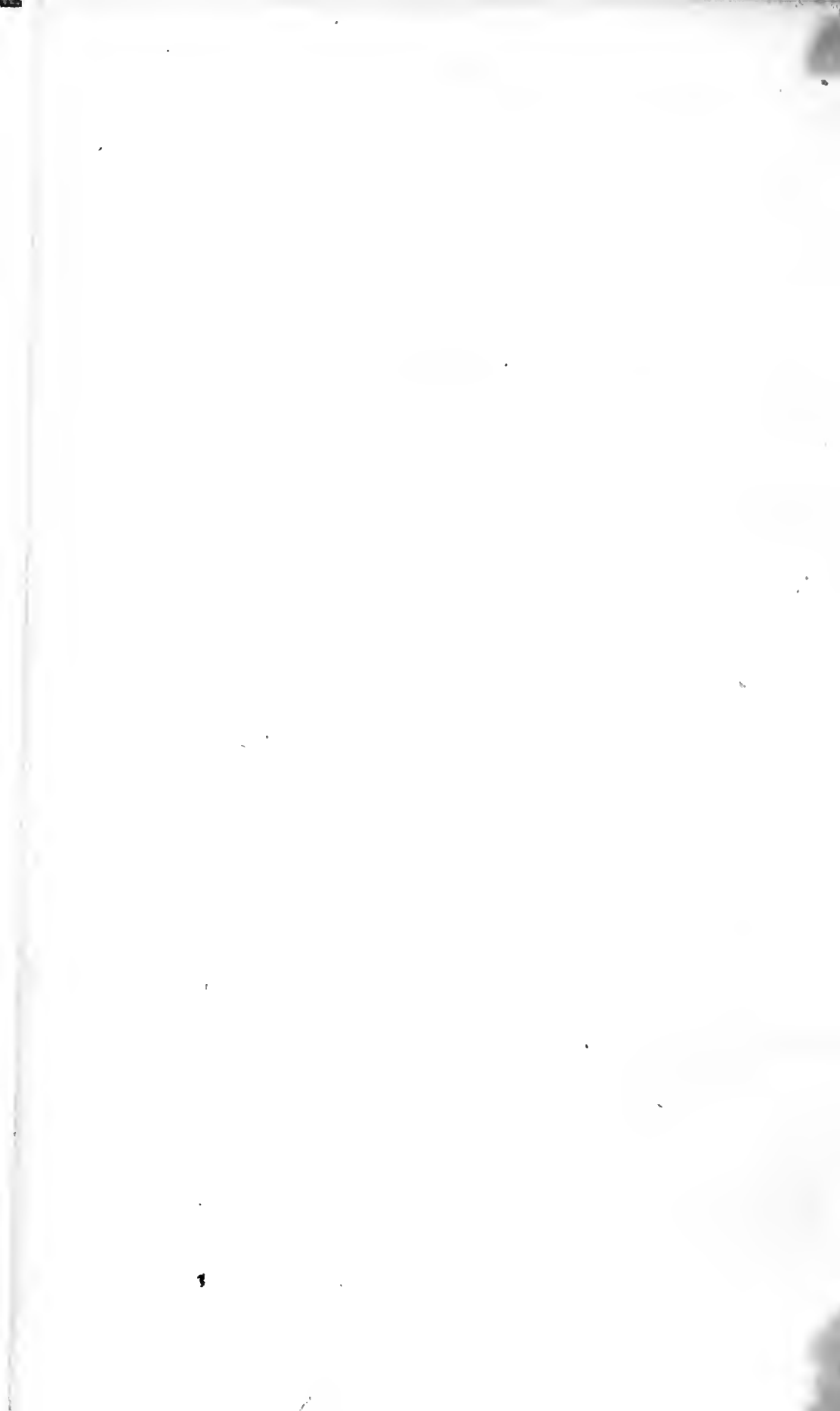
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G. L.

THE  
NORTH BRITISH REVIEW.

NO. LXXXIX.

FOR SEPTEMBER, 1866.

- ART. I.—1. *Phantastes; a Faerie Romance*. BY GEORGE MAC DONALD. London, 1858.  
2. *The Portent*. London, 1864.  
3. *Adela Cathcart*. 3 vols. London, 1864.  
4. *David Elginbrod*. 3 vols. London, 1862.  
5. *Alec Forbes of Howglen*. 3 vols. London, 1865.

NOVEL-WRITING is so thriving a trade in these days, that there is no marvel if the numberless men and women of great talent who make their living by it, should produce many very effective works that are not of the slightest permanent value. The sheaves in his barn are so many and fat, that a popular novelist may afford to despise an unprofitable sprig of laurel. It is quite unnecessary to produce books that will live; for a novel will run through half-a-dozen editions without possessing any principle of vitality. And accordingly, although clever novels are many, and even amusing novels not rare, it is certain that you could count on the fingers of one hand the living novelists whose works contain either beauty or truth enough to procure for them a place in literature.

The books we have named at the head of this article are among those rare exceptions. But indeed it is difficult to imagine works of the same class differing more widely from one another than Mr. Mac Donald's differ, in other things as well as in merit, from the novel of the day. We do not anticipate for them a very noisy, or a very violent popularity. They are not calculated to amuse an indolent fancy. But to make amends for that deficiency, they have a rare value and interest for all serious and cultivated minds.

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They are certain to produce a deep and permanent impression on the readers who are able to appreciate them at all; and, like all truly beautiful works, their effect is not only charming, but consoling and elevating as well. Mr. Mac Donald is a poet, and possesses in a considerable degree both elements of the poetical power—a delicate sense of beauty, and a talent for beautiful expression. In his prose writing, and especially in his descriptive writing, there is a lucid transparency of style that has all the charm of Hawthorne. Of his poetry there is more to be said than we can find room for on this occasion. We must be content with noticing his prose writings; and even these very briefly. These, however, contain in themselves a great deal of poetry, and here and there a good deal of verse. Mr. Mac Donald's genius especially loves to dwell on the borderland between poetry and prose; and we might have added, between this world and romance, were it not that whenever he approaches the border, he is certain to pass over into shadowy regions, more beautiful than our weary earth.

Were it not for Mr. Mac Donald, we should have imagined that whatever had become of the age of chivalry, the age of fairy tales at least was gone for ever. *On a toujours les défauts de ses qualités*. We cannot escape the defects of our excellences. And there is nothing in all the triumphs of the nineteenth century—"in the steamship, in the railway, in the thoughts that sway mankind"—which is peculiarly favourable, little which is not absolutely hostile, to the spirit which makes a true fairy tale conceivable. The love of the marvellous is not indeed banished from the human breast; but then it is perpetually fed upon stimulants so

gross, that the simple wonders which delighted our ancestors are rejected with something like contempt by the pampered and languid fancy of their unhappy children. We can scarcely read a newspaper now-a-days, without being told that the electric telegram, and express trains, and Armstrong guns, and the newspaper itself, are infinitely greater marvels than the marvels of the fairy tale. So they are;—to the dull. There is a stupid wonder, and an imaginative wonder: the wonder of the child, and the wonder of the pedant. The dullest of men is not entirely insensible to the power and genius which have subdued the great forces of nature to his daily use. Those mechanical marvels of which we boast are too loud, huge, and palpable, not to amaze those whom they do not interest. But it is in much smaller and simpler things than these that the mind of the child finds the wonders of fairy-land. Mr. Mac Donald, in his last novel, describes a little girl, his heroine, haunting the corn-fields at harvest:—

“How mysterious she thought those long colonnades of slender pillars, each supporting its own waving comet-head of barley! Or, when the sun was high, she would lie down on the ground, and look far into the little forest of yellow polished oat-stems, stretching away and away into the unseen. . . . If she were only small enough to go wandering about in it, what wonders might she not discover!”

This is a little girl of very unusual poetical feeling; but there are few children who would not understand her longing to go wandering in that mysterious forest of oat-stems, or share her faith in the wonders that await her there. If there are any, they are too sensible to care for fairy tales. For both elements of the feeling Mr. Mac Donald is describing—the childlike delight in the beauty, and the childlike faith in the magic, of common things—are equally indispensable for the enjoyment, and therefore for the production, of the fairy tale. If this be so, it is easy to see why this highly intellectual community should afford the worst possible soil for the growth of such marvels. Fairy tales are serious things, or they are nothing; and this age will not treat them in a serious spirit. People are too intelligent now-a-days, and a great deal too well-informed to endure the picture of an arbitrary world, without regular laws, and uniformity of sequence. If a writer is sufficiently fanciful to try and tell tales of fairy-land, he is sure to accompany his marvels with some clumsy factitious tag, which makes it very clear to the knowing that he has never really been in

that wonderful region at all. He is either humorous, and then he is too funny; or earnest, and then he is too determinately moral; or poetical, and then he is a great deal too sentimental for fairy-land. In any case, he is sure to betray an uneasy consciousness that he is an impostor, who does not believe his own story. No doubt there are five or six traditional tales unapproachable for beautiful simplicity and the gravity of their magic, which even in this sophisticated generation are still the delight of good children, and of which the charming memory, at least, has not vanished from the minds of the old. But they have come down to us from a simpler age; and although they can never lose their hold on the general imagination, perhaps they are scarcely valued so highly as they should be. A reading public which thinks it a considerable thing to have written the *Woman in White*, must necessarily think it a slight thing to have written *Jack and the Bean Stalk*. The depraved imagination which is fascinated by *Lady Audley*, is a great deal too credulous to believe in the *White Cat*. It is little to say that nobody can write such tales as these. We cannot even edit them. It is truly painful to open the recent editions of our old favourites. Not one of them that is not contaminated by some degrading moral, or some impertinent witticism. If any one wishes to retain the conviction that we are a great deal more simple and natural in “this England and this now” than Frenchmen were in the reign of Louis XIV., let him by all means avoid comparing the *Fairy Realm* of Mr. Thomas Hood with the *Contes* of Perrault. The age of Louis XIV. was itself too late for the invention of the old fairy tales. They are not the creation of a time that writes books. But if we cannot imitate them, let us at least preserve them in their original simplicity, and hand them down to our children as we got them from our grandmothers. “The man who” inserts puns about Chang and Anak into the story of *Tom Thumb* is worthy of the most severely virtuous denunciation with which Joseph Surface himself could have wound up the sentence.

Of course it is quite idle to regret that this generation has lost the fairy gift. Nature, that brings not back the mastodon, does not bring back to the old age of the world the freshness and simplicity of its childhood; and there could not probably be stronger evidence of incapacity to write fairy tales at all than an attempt to imitate those old ones, which seem to have grown, without the aid of a writer, in the popular mind of all nations. Mr. Mac Donald, accordingly, being a man

of genius, and having a fairy gift of his own, if not quite the same which Mother Goose had, does not imitate the old tales, but seems to draw beautiful treasures of fancy for himself from the same inexhaustible source. His genius has a natural affinity for such subjects, and his treatment of them reminds his melancholy readers that there once were days when they might have said the same of their own more prosaic nature. We are forced to listen to him until we "do beget that golden time again." But his fairies, as we have hinted, are not quite like our old friends. They have the arbitrary character of their race. They are as fantastic as graceful. You never know what is going to happen to you in their world, and you never can account for anything after it has happened. But there are deeper elements in their nature than in that of their predecessors. It is not that Mr. Mac Donald's tales are tagged with a moral. Didactic fiction is bad enough; but didactic fairy tales are the most abominable of literary impositions. Mr. Mac Donald is not exposed to this censure. Indeed, his fairies are much less directly didactic than the old stories, in which good girls were rewarded, and bad girls punished, after a fashion that was rather grotesque but always rigidly just. But their views of life are more profound, and their relation to human affairs is a much more serious matter than we used to suppose. The truth is, that although Mr. Mac Donald's fairy stories have not, in the technical sense, a moral, they are inspired, like everything else he writes, by a profound religious feeling. This is not pressed upon the reader. The fairies are aerial, spiritual beings, not preachers. The tales are too imaginative to be sermons in disguise. But it is impossible to avoid feeling, in reading them, that they are informed by one pervading principle, which has constant possession of the poet's mind, and must of necessity give shape to his work. "Life," says Mr. Mac Donald, quoting Novalis, "is not a dream; but it may and perhaps ought to become one." "A man who dreams, and knows that he is dreaming, thinks that he knows what waking is, but knows it so little that he mistakes, one after another, many a dim and vague change in his dream for an awaking. When the true waking comes at last, he is filled and overflowed with the powers of its reality. . . . So shall it be with us, when we wake from this dream of life into the truer life beyond, and find all our present notions of being thrown back as into a dim vapoury region of dreamland, when yet we thought we knew, and whence we looked forward to the present." He

makes his David Elgiubrod express the same idea, in a simile that is in itself a poem:—"We ken no more, Mr. Sutherland, what we're growin' till than that neep-seed there kens what a neep is, though a neep it will be. The only odds is that we ken that we dinna, and the neep-seed kens naething at all about it. But ae thing, Maister Sutherland, we may be sure o',—that whatever it be, it will be worth God's making and our growing." We are in the darkness, therefore, and are growing towards the light. It is never out of his mind that this world is a place of education for mankind, and that all its cares and passions, its good and evil, are working together to fit the human spirit for the final awakening, and the light of the countenance of the Father in heaven.

We see no reason why a poet, whose habitual thoughts are such as these, should forget them even when he is writing fairy tales. There is nothing forced in the manner of their expression. They are not hurled at the reader as from a pulpit. But they are present to the mind of the poet himself, whether he is moving for the time in the world of phantasy, or on the common earth; and if they give to his most fanciful productions a certain solemnity which we do not look for, these productions are all the more beautiful and fruitful for that, and lay hold on the reader's affections as well as on his imagination. It is out of the question to take fairy tales to pieces, and we must be satisfied by directing our readers to the beautiful story of the Shadows, and of the Light Princess, in *Adela Cathcart*. But there is luckily one of Mr. Mac Donald's romances from which it is possible to make extracts, though we cannot certainly pretend to give any true notion of *Phantastes*, either by these or by our talk about it. There is much that is fantastic in the book, but the reader is made to feel, as he ought to do in romance, that what is most impossible is nevertheless perfectly true. Some of the figures are so gracious and beautiful, that no one can hesitate to believe in them; but there are others who more closely resemble the flighty and aggressive creatures of their race, with whom most of us have been hitherto familiar. The reader in this respect is like Anodos, the human hero of *Phantastes*, and finds "faerie land full of oddities, incredibly ridiculous things, which a man is compelled to treat as real existences, although all the time he feels foolish for doing so." Neither is the land composed entirely of beauties and harmless oddities. There is a great deal also that is wrong in it. "If there are great splendours there are corresponding horrors, heights and depths,

beautiful women and awful fiends, noble men and weaklings."

Through this sort of world it is that Anodos is permitted to wander. His entrance to it is very effective:—

"In the midst of the intervening twilight, before I entered what appeared to be the darkest portion of the forest, I saw a country maiden coming towards me from its very depths. She did not seem to observe me, for she was apparently intent upon a bunch of wild-flowers which she carried in her hand. I could hardly see her face; for though she came right towards me, she never looked up, but when we met, instead of passing, she turned and walked alongside of me for a few yards, still keeping her face downwards, and busied with her flowers. She spoke rapidly, however, all the time, in a low tone, as if talking to herself, but evidently addressing the purport of her words to me. She seemed afraid of being observed by some lurking foe. 'Trust the oak,' said she; 'trust the Oak, and the Elm, and the great Beech; but shun the Ash and the Alder, for the Ash is an ogre—you will know him by his thick fingers, and the Alder will smother you with her web of hair, if you let her near you at night.' All this was uttered without pause or alteration of tone. Then she turned suddenly and left me, walking still with the same unchanging gait."

By and by the trees justify all that the country maiden says of them. That is to be expected; but what is remarkable is the truly poetical feeling and imaginative power which sets all the trees of the forest in motion, as the friends or enemies of men, without in the least disturbing either the beauty or the terror—for it abounds in both—of this wonderful fairy romance, by the faintest suggestion of the absurd. There is nothing too grotesque to be deeply impressive in the horror of the Ash, the ogre with a hole in his heart, which he is always trying to fill up by burying men at the foot of his tree. Nor is it possible to read the story of the Beech and think of anything but its beauty and tenderness. On the other hand, there is nothing so obviously pregnant with good meanings, even in the more significant parts of the story, as to oppress the reader with ethical considerations, too weighty for Faerie Land.

Take, for instance, the following adventure. Our readers must understand that Anodos has suffered some strange and terrible things in his wanderings through the forest. He has escaped from the Ash, but in spite of many warnings he has been befooled by the maiden of the Alder tree. He has found his shadow, and he suffers as many miseries from finding his shadow as ever Peter

Schlemihl did from losing his. He found it, by looking into a forbidden closet in the Ogre's house. An old woman, of strange and forbidding aspect, explains to him that everybody's shadow is ranging up and down, and looking for him. "Yours has found you," she says, "as every person's is almost certain to do, who looks into that closet, especially after meeting one in the forest, whom I daresay you have met."

The shadow is a very dismal companion. It seems to fall where it pleases, without deference for its master's position with regard to the sun; and whatever it falls upon it blights. Sometimes "rays of gloom would issue from the central shadow as from a black sun, lengthening and shortening with continual change, and wherever a ray struck, that part of earth, or sea, or sky, became void and desert and sad to the heart of Sir Anodos. The shadow is still his attendant, when—

"One bright noon, a little maiden joined me, coming through the wood in a direction at right angles to my path. She came along singing and dancing, happy as a child, though she seemed almost a woman. In her hands—now in one, now in another—she carried a small globe, bright and clear as the purest crystal. This seemed at once her plaything and her greatest treasure. At one moment, you would have thought her utterly careless of it, and at another, overwhelmed with anxiety for its safety. But I believe she was taking care of it all the time, perhaps not least when least occupied about it. She stopped by me with a smile, and bade me good-day with the sweetest voice. I felt a wonderful liking to the child—for she produced on me more the impression of a child, though my understanding told me differently. We talked a little, and then walked on together in the direction I had been pursuing. I asked her about the globe she carried, but getting no definite answer, I held out my hand to take it. She drew back, and said, but smiling almost invitingly the while, 'You must not touch it;'—then, after a moment's pause—'Or if you do, it must be very gently.' I touched it with a finger. A slight vibratory motion arose in it, accompanied, or perhaps manifested, by a faint sweet sound. I touched it again, and the sound increased. I touched it the third time; a tiny torrent of harmony rolled out of the little globe. She would not let me touch it any more.

"We travelled on together all that day. She left me when twilight came on; but next day, at noon, she met me as before, and again we travelled till evening. The third day she came once more at noon, and we walked on together. Now, though we had talked about a great many things connected with Fairy Land, and the life she had led hitherto, I had never been able to learn anything about the globe. This day, however, as we went on, the shadow glided round and enwrapt the maiden. It could not change her. But my desire to know about the globe, which in his gloom began to waver as

with an inward light, and to shoot out flashes of many-coloured flame, grew irresistible. I put out both my hands and laid hold of it. It began to sound as before. The sound rapidly increased, till it grew a low tempest of harmony, and the globe trembled, and quivered, and throbbed between my hands. I had not the heart to pull it away from the maiden, though I held it in spite of her attempts to take it from me; yes, I shamed to say, in spite of her prayers, and, at last, her tears. The music went on growing in intensity and complication of tones, and the globe vibrated and heaved; till at last it burst in our hands, and a black vapour broke upwards from out of it; then turned, as if blown sideways, and enveloped the maiden, hiding even the shadow in its blackness. She held fast the fragments, which I abandoned, and fled from me into the forest in the direction whence she had come, wailing like a child, and crying, 'You have broken my globe; my globe is broken—my globe is broken!' I followed her, in the hope of comforting her; but had not pursued her far, before a sudden cold gust of wind bowed the tree-tops above us, and swept through their stems around us; a great cloud overspread the day, and a fierce tempest came on, in which I lost sight of her. It lies heavy on my heart to this hour. At night, ere I fall asleep, often, whatever I may be thinking about, I suddenly hear her voice, crying out, 'You have broken my globe; my globe is broken; ah, my globe!'

We must try to find room for another of the adventures of Anodos,—the leading adventure of the romance. It seems to us a very beautiful fancy. But in the narrow limits within which we are obliged to compress it, we fear it must lose a great part of its charm. The first night of his travels in Faerie-land, Anodos finds his way into a cave. Scraping away the moss from the rock, he finds, to his surprise, first, that he is lying on a block of alabaster, and then, that within the alabaster-crust, there lies the dimly-visible form, in marble, of a reposing woman. This marble lady appears to him perfectly lovely; and he persuades himself that by some means life might be given to this form also, as to so many others which he remembers in the history of similar enchantments. He sings to her a passionate entreaty to awake from her marble sleep. There arises a slightly crashing sound:

"Like a sudden apparition that comes and is gone, a white form, veiled in a bright robe of whiteness, burst upwards from the stone, stood, glided forth, and gleamed away towards the woods. . . . I gazed after her in a kind of despair. Found, freed, lost. It seemed useless to follow, yet follow I must. I marked the direction she took, and hastened towards the forest."

In this pursuit he meets with the adven-

tures to which we have alluded, with the Alder, and the Ash, and his own shadow. But he never finds the marble lady.

At length he comes to the palace of the Queen of Faerie, which seems to be inhabited by gracious and beautiful forms; but his power of seeing fairies of the higher order had almost left him, since the shadow had fallen upon him, and he is only vaguely conscious of their presence. In the palace, where he lives for a week—being served, in the proper traditional fashion, by invisible attendants,—the shadow for a time ceases to torment him. One evening, after wandering through one lighted arcade and corridor after another, he came to a vast hall of the palace.

"At length I arrived, through a door that closed behind me, in another vast hall of the palace. It was filled with a subdued crimson light; by which I saw that slender pillars of black, built close to walls of white marble, rose to a great height, and then, dividing into innumerable divergent arches, supported a roof, like the walls, of white marble, upon which the arches intersected intricately, forming a fretting of black upon the white, like the network of a skeleton-leaf. The floor was black. Between several pairs of the pillars upon every side, the place of the wall behind was occupied by a crimson curtain of thick silk, hanging in heavy and rich folds. Behind each of these curtains burned a powerful light, and these were the sources of the glow that filled the hall. A peculiar delicious odour pervaded the place. As soon as I entered, the old inspiration seemed to return to me, for I felt a strong impulse to sing; or rather it seemed as if some one else was singing a song in my soul, which wanted to come forth at my lips embodied in my breath. But I kept silence; and feeling somewhat overcome by the red light and the perfume, as well as by the emotion within me, and seeing at one end of the hall a great crimson chair, more like a throne than a chair, beside a table of white marble, I went to it, and, throwing myself in it, gave myself up to a succession of images of bewildering beauty, which passed before my inward eye, in a long and occasionally crowded train. Here I sat for hours, I suppose; till, returning somewhat to myself, I saw that the red light had paled away, and felt a cool gentle breath gliding over my forehead. I rose and left the hall with unsteady steps, finding my way with some difficulty to my own chamber, and faintly remembering, as I went, that only in the marble cave, before I found the sleeping statue, had I ever had a similar experience. . . .

"At length, one night, suddenly, I bethought me of lifting one of the crimson curtains, and looking, if perchance, behind it there might be hid some other mystery, which might at least remove a step further the bewilderment of the present one. Nor was I altogether disappointed. I walked to one of the magnificent draperies, lifted a corner, and peeped in. There, burned a great, crimson, globe-shaped light, high in the

cubical centre of another hall, which might be larger or less than that in which I stood, for its dimensions were not easily perceived, seeing that floor and roof and walls were entirely of black marble. The roof was supported by the same arrangement of pillars radiating in arches, as that of the first hall; only, here, the pillars and arches were of dark red. But what absorbed my delighted gaze, was an innumerable assembly of white marble statues, of every form, and in multitudinous posture, filling the hall throughout. These stood, in the ruddy glow of the great lamp, upon pedestals of jet black. Around the lamp shone in golden letters, plainly legible from where I stood, the two words—

“TOUCH NOT !

There was in all this, however, no solution to the sound of dancing; and now I was aware that the influence on my mind had ceased. I did not go in that evening, for I was weary and faint, but I hoarded up the expectation of entering, as of a great coming joy.”

At length, at the right moment, he darts into the ninth hall :

“It was full of the most exquisite moving forms. The whole space wavered and swam with the involutions of an intricate dance. It seemed to break suddenly as I entered, and all made one or two bounds towards their pedestals; but, apparently on finding that they were thoroughly overtaken, they returned to their employment (for it seemed to them earnest enough to be called so) without further heeding me. Somewhat impeded by the floating crowd, I made what haste I could towards the bottom of the hall; whence entering the corridor, I turned towards the tenth. I soon arrived at the corner I wanted to reach, for the corridor was comparatively empty; but although the dancers here, after a little confusion, altogether disregarded my presence, I was dismayed at beholding, even yet, a vacant pedestal. But I had a conviction that she was near me. And as I looked at the pedestal, I thought I saw upon it, vaguely revealed as if through overlapping folds of drapery, the indistinct forms of white feet. Yet there was no sign of drapery or concealing shadow whatever. But I remembered the descending shadow in my dream. And I hoped still in the power of my songs; thinking that what could dispel alabaster, might likewise be capable of dispelling what concealed my beauty now, even if it were the demon whose darkness had overshadowed all my life. . . .

“Next night, it was just the same. I walked through the red glimmer of the silent hall; but lonely as there I walked, as lonely trod my soul up and down the halls of the brain. At last I entered one of the statue-halls. The dance had just commenced, and I was delighted to find that I was free of their assembly. I walked on till I came to the sacred corner. There I found the pedestal just as I had left it, with the faint glimmer as of white feet still resting on the dead black. As soon as I saw it I seemed to feel a presence which longed to become visible; and, as it were, called to me to gift it with self-

manifestation, that it might shine on me. The power of song came to me. But the moment my voice, though I sang low and soft, stirred the air of the hall, the dancers started; the quick interweaving crowd shook, lost its form, divided; each figure sprang to its pedestal, and stood, a self-involving life no more, but a rigid, life-like marble shape, with the whole form composed into the expression of a single state or act. Silence rolled like a spiritual thunder through the grand space. My song had ceased, scared at its own influences. But I saw in the hand of one of the statues close by me, a harp whose chords yet quivered. I remembered that as she bounded past me, her harp had brushed against my arm; so the spell of the marble had not unfolded it. I sprang to her, with a gesture of entreaty, laid my hand on the harp. The marble hand, probably from its contact with the uncharmed harp, had strength enough to relax its hold, and yield the harp to me. No other motion indicated life.

“Instinctively I struck the chords and sang. And not to break upon the record of my song I mention here, that as I sang the first four lines, the loveliest feet became clear upon the black pedestal; and ever as I sang, it was as if a veil were being lifted up from before the form, but an invisible veil, so that the statue appeared to grow before me, not so much by evolution, as by infinitesimal degrees of added height. . . .

“Ever as I sang the veil was uplifted; ever as I sang, the signs of life grew; till when the eyes dawned upon me, it was with that sunrise of splendour which my feeble song attempted to re-inbody. The wonder is, that I was not altogether overcome, but was able to complete my song as the unseen veil continued to rise. This ability came solely from the state of mental elevation in which I found myself. Only because uplifted in song, was I able to endure the blaze of the dawn. But I cannot tell whether she looked more of statue or more of woman; she seemed removed into that region of phantasy where all is intensely vivid, but nothing clearly defined. At last, I sang of her descending hair, the glow of soul faded away, like a dying sunset. A lamp within had been extinguished, and the house of life shone blank in a winter morn. She was a statue once more—but visible, and that was much gained. Yet the revulsion from hope and fruition was such, that, unable to restrain myself, I sprang to her, and, in defiance of the law of the place, flung my arms around her, as if I would tear her from the grasp of a visible Death, and lifted her from the pedestal down to my heart. But no sooner had her feet ceased to be in contact with the black pedestal, than she shuddered and trembled all over; then, writhing from my arms, before I could tighten their hold, she sprang into the corridor, with the reproachful cry, ‘You should not have touched me!’ darted behind one of the exterior pillars of the circle, and disappeared. I followed almost as fast; but ere I could reach the pillar, the sound of a closing door, the saddest of all sounds sometimes, fell on my ear; and, arriving at the spot where she had vanished, I saw, lighted by a pale yellow lamp which hung above it, a heavy, rough door, altogether unlike others I



had seen in the palace; for they were all of ebony, or ivory, or covered with silver plates, or of some odorous wood, and very ornate; whereas this seemed of old oak, with heavy nails and iron studs. Notwithstanding the precipitation of my pursuit, I could not help reading, in silver letters, beneath the lamp: "*No one enters here without the leave of the Queen.*" But what was the Queen to me, when I followed my white lady? I dashed the door to the wall, and sprang through. Lo! I stood on a waste windy hill. Great stones like tomb-stones stood all about me. No door, no palace was to be seen. A white figure gleamed past me, wringing her hands, and crying, "Ah! you should have sung to me; you should have sung to me!" and disappeared behind one of the stones. I followed. A cold gust of wind met me from behind the stone; and when I looked, I saw nothing but a great hole in the earth, into which I could find no way of entering. Had she fallen in? I could not tell. I must wait for the daylight. I sat down and wept, for there was no help."

If any reader is disposed to find in these fairy adventures a deeper meaning than lies on the surface, he may search for it, not without hope; and even if he is not quite successful in the quest, he will at least be able to say, as Anodos himself does of the tale he read in the Faerie Queen's library:

"I trust I have carried away in my soul some of the exhalations of their undying leaves. In after hours of deserved or needful sorrow, portions of what I read there have often come to me again, with an unexpected comforting; which was not fruitless, even though the comfort might seem in itself groundless and vain."

Mr. Mac Donald displays quite as much power in treating that kind of preternatural influence which may be connected with common life, as in describing those marvels which are removed entirely from the real world. This also is a talent which had seemed of late years to be perishing out of English literature. We cannot at this moment call to mind a romance, in which either ghosts or witches have been introduced with anything like success, since *Redgauntlet* and the *Bride of Lammermoor*. Sir Walter himself was not always fortunate in his dealings with the other world. But Blind Willie's tale in the former novel, and Ailsie Gourlay and Annie Winnie in the latter, are, in their different ways, such masterpieces of the supernatural, as no one can reasonably hope to rival in times when ghosts have given up attempting to impress the imagination, and have taken instead to turning tables and tying knots. The meagre and stupid materialism which lies at the base of what is now called spiritualism, despoils the imagination, among better things, of all that was mysterious, pathetic, or awful in the old

superstitions. The very method by which disembodied spirits have chosen to communicate with this generation of mortal men, presents difficulties to the artist that are almost insuperable. They and their ways are too petty, too mean, and a great deal too eccentric to be fit for artistic treatment. The whole field of the supernatural seemed to be exhausted and barren, when a great writer tried to work it once again—and failed egregiously. Sir Edward Lytton Bulwer wrote a book full of talent and learning and bad philosophy. He could do no less. But for all the higher purposes of such a romance his *Strange Story* might just as well have been produced by some one or some dozen of the vulgar and idiotic spectres, who rap out ill-spelt lies to the faithful in the names of Shakespeare and Burns. There is generally a little absurdity in Sir Edward's novels; but that element is developed nowhere else so strongly as in this unhappy *Strange Story*. It is pitiful to see a man of genius "fumbling at the lock of the spiritual world" with such clumsy instruments as diamond powders and naphtha lamps and enchanted canes. Mr. Mac Donald uses no such tawdry properties; and his readers have one temptation the less for throwing a ghost story aside, as a puerile absurdity.

There are many very effective novels, which contain impossible characters, and turn on incredible events. But no book will ever take a strong hold of the imagination which impresses us while we are reading it with a sense of the incredible. This is the case with the *Strange Story*. Nobody believes a word of it, from beginning to end. It is very well for Sir Edward Bulwer to claim, as he does, "the privilege to avail himself of the marvellous agencies which have ever been at the command of the fabulist." We do not dispute the privilege. But when those marvellous agencies are brought into contact with the real world, we must be made to feel, for the moment at least, that the preternatural phenomena are just as true in their way as the more familiar incidents of the story. They may be utterly incredible, but we must be induced to believe in them. The privilege of employing supernatural agencies does not exempt the artist from the obligation of producing a harmonious work. The spirits, if they are significant at all, must be spiritual, imaginative; and although the laws of their nature may be unknown or unintelligible to us, or may differ as widely from those under which we live and move as the anatomy of Mr. Mac Donald's giant, who kept his heart sometimes in a flour-barrel and sometimes in an eagle's nest, must have differed from the anatomy of

ordinary men, they must be such as the associating power of the imagination shall bring naturally into harmony with the human character and story they profess to influence. When a person who at one and the same moment is a beautiful youth of twenty and a worn-out sinner of fourscore, who has the power of influencing other people, at the distance of many miles, by causing a luminous shadow of himself to appear to them and express his wishes, and who is able to command "marvellous agencies" by means of an enchanted walking-stick, is represented in proximity to characters as like the men and women of everyday life as Sir Edward Bulwer can make them, the reader's common-sense is irretrievably offended. The romancer is quite entitled, no question, to invent as many marvellous agencies as he pleases. But there must be method in the marvel. The spiritual world may have laws of its own, but the manifestation of the spiritual world to us must be in accordance with the laws of humanity. The real difficulty of such a romance is in blending the human and superhuman elements of the story; and it is not to be overcome by asserting that any number of magic implements have been discovered for a channel of communication. Sir Edward does not mend matters by the dreary pages of metaphysics which he brings in every now and then in order to reconcile his marvels with the intellectual convictions of his readers. The metaphysics and the fancy do not hang together; and if they did, it was no part of Sir Edward's business in that place to make things intelligible to the understanding of his readers, but only to make them credible to the imagination. His philosophy, indeed, has very much the same disenchanting effect as Mrs. Radcliffe's explanation of her ghosts in *Udolpho*. Mr. Mac Donald has a passage in one of his novels which admirably illustrates the true nature of superstition, and the extent of Sir Edward's blunder. A medical student has remained in the dissecting-room after the other students have gone, and worked till it has grown dark. At last he falls asleep; and when he awakes "the candle is *bobbing* in its socket, alternately lighting and shadowing the dead man on the table. Strange glooms are gathering about the bottles and shelves, and he feels," as he afterwards confesses, "a little uncomfortable—not frightened, but *eerie*."

"He was just going to rise and go home, when, as he stretched out his hand for his scalpel, the candle sunk in the darkness, and he lost the guiding glitter of the knife. At the same moment he caught a doubtful gleam of two eyes looking in at him from one of the windows.

That moment the place became insupportable with horror. The vague sense of an undefined presence turned the school of science into a charnel-house. He started up, hurried from the room, feeling as if his feet took no hold of the floor, and his back was fearfully exposed, locked the door, threw the key upon the porter's table, and fled."

The essence of the fear, in this case, as of all superstitious terrors, is in the vagueness. And Sir Edward's attempt, if it had been successful, to present distinct philosophical conceptions to the mind of his readers, would have been absolutely fatal to the effect which the supernatural part of his story was intended to produce. He is trying to remove the shadows, instead of making them darker; and to make things clear and definite, which are awful only so long as they are obscure. It is true that the philosophy with which he furnishes his readers is vague enough, and dim enough, for the most incoherent of spectres: but that is no merit of Sir Edward Bulwer's.

*The Portent* is a much slighter and a far more impressive performance. The preternatural agencies are of a different kind, but we should suppose they are not less difficult to handle. The ordinary reader is as much disposed to resent the introduction into the real world of mesmeric influence and the second sight, as of spectres, and luminous shadows, and the *elixir vitæ*. But these are difficulties which Mr. Mac Donald's genius is peculiarly fitted to deal with. He encumbers his tale with as little disputable theory as possible. He does not attempt, like his senior, to persuade us by argument that there is no reason why we should not believe it. But he leads us so gently over the march between the world of our own experience and the dreamland in which his story is transacted, that it is not till the end of the whole matter that we are tempted to ask ourselves on which side we are of "the wall that sunders ghosts and shadow-casting men." His hero is born in the Highlands, and, in a book which contains a great deal of true poetry, there is nothing finer than his account of the solitude and mystery of the mountains among which he spends his childhood. From infancy his mind is full of wild and fearful tales. The gift of second sight, as an old nurse assured him, had belonged to some of his ancestors; he himself had a peculiarly keen sense of hearing, and sometimes an awful dread would seize him that in his case the prophetic power had been transferred to this sense from that of sight. One night, as he lies half-dreaming on the hill, he hears, "clear, though faint and far away, the sound as of the iron-shod hoof of a horse in furious

gallop along an uneven rocky surface. It seemed to come from the face of the mountain, where no horse could go at that speed, even if its rider courted his certain destruction. There was a peculiarity, too, in the sound, a certain tinkle or clank, . . . just such as would result from one of the shoes being loose. A strange terror seizes him, and he hastens home. He tells this to his old nurse, and she, in circumstances that greatly heighten the terror of her story, tells him an old legend of his family which has been strangely connected with the circumstances of his own birth. According to the legend, the strange sound is the gallop of a far-back ancestor, a fratricide, who is doomed to race for ever on the mountain side; and ever as he races his gallop is mingled with the clank of a loose and broken shoe. The sound is never heard by any of the blood of the wicked man without betokening evil to him who hears it. This young Highlander becomes a tutor in the house of an English nobleman, and there he finds the heroine, a beautiful young lady of rank, and whose friends tell him that her intellect is in a quite abnormal condition. This Lady Alice is rather faint and dreamlike, but she is a perfectly credible, and even impressive character, notwithstanding. We must not spoil the passionate love-story which follows, by trying to tell it in short space; nor is it possible even to indicate, in any words but Mr. Mac Donald's, the power and effect with which the love-story is blended with the old legend, and every crisis of it signalized by the owner of the clanking shoe. As it is, we fear our meagre abstract will scarcely serve the purpose for which we make it; for what we are anxious that our readers should observe, is the skill with which Mr. Mac Donald seizes every opportunity of suggesting the ideas of superstitious and romantic awe, which his story is intended to excite, without pressing them too rudely on the minds of his readers. In character, scenery, incident, and style, his story is all of a piece. Not one of his clear and musical sentences that does not breathe the very atmosphere of superstition; and of a superstition so poetical that the most positive and logical of his readers may yield his imagination to its influence without a blush. It is plain that this is a peculiarity which cannot survive compression. The beauty of the tale is inseparable from the manner in which it is told. But we have probably said enough to illustrate and to warrant the distinction we draw between a genuine romance and Sir Edward Bulwer's artificial and ineffective mode of handling somewhat similar topics. Sir Edward introduces you to a commonplace character—rather badly drawn

for the author of the *Caxton's*,—but more or less like real life, who tells a marvellous tale of ghosts and enchantments, which, in real life, such a man would have laughed at as a silly absurdity; and then he attempts to reconcile the ordinary and extraordinary elements of his story by an elaborate process of metaphysical reasoning, and an array of quotations which would have done honour to Sir William Hamilton. Mr. Mac Donald follows a different plan. He does not take the mind of his reader to pieces, and try to affect his imagination in one chapter, and to argue him over in the next. He sees how the character must have arisen, to which such a tale as he makes his hero narrate might appear not only credible, but as absolute and undeniable an experience of his own life as the common incidents of their boyhood appear, in the retrospect, to ordinary men. And all the peculiarities in his early life, the locality in which his youth was passed, the superstitious influences which surrounded him, his morbid sensibility of hearing, which gave shape and bias to an excitable fancy, are brought before us so easily and naturally, that the most sober understanding has little difficulty in admitting the truth of the character, or its relationship to common humanity. And when you believe in the hero, you cannot refuse your faith to his story. Whether, indeed, he actually heard the clink of the fatal horse-shoe, is a question which each reader may resolve for himself. Mr. Mac Donald says nothing to preclude a natural interpretation of that phenomenon, if any one should choose to adopt it. An excited fancy, and a morbidly acute sense of hearing, may seem to afford a sufficient explanation. It is true that Lady Alice hears it also. But then there is *rapproch* between the two; and it appears that, far back in their history, there had been a relationship between their families. In representing the influence of these two characters on one another, Mr. Mac Donald avails himself of the phenomena of a very obscure physiology. But he uses without straining them, and without suggesting the idea of an improbability. The mesmeric power of a hero requires as delicate handling as his superstitions, and they are treated in the same way, and with the same success. There is no elaborate discussion of the laws of nature on which such phenomena depend; but they are so entirely consistent with the nature and temperament of both hero and heroine, that they do not appear in the least degree anomalous or out of harmony with the beauty of the romance.

The same elements of superstition and mesmerism are introduced into the novel of *David Elginbrod*. But in spite of some

fine ideas and some very telling scenes, they are not, as it seems to us, quite so successfully treated. This comparative failure is not unintelligible, for the task was indefinitely more difficult. The novel is, in the first place, a great deal longer than the romance, and it is easy to see that the marvels of a tale so brief as *The Portent*, may vividly impress the imagination, which shall be quite incapable of bearing the prolonged strain of three octavo volumes. And there is an obstacle of a different kind, and more perplexing, which the novelist has to overcome. *David Elginbrod* is, after all, a story of this world; and mysteries of all kinds are apt to appear fantastic when they are brought too closely in contact with the realities of life. It is true that without some background of reality, the mystery does not touch us at all. The supernatural is never effective in literature except when the things of the invisible world have forced their way into the world of sense. And this is one reason why *The Portent* impresses us so profoundly. In *The Portent* there is just enough of ordinary life to give to the extraordinary a hold on the imagination. But when a novel claims specially to delineate the characters and events of modern life; when every page suggests to the reader, not only by the incidents and conversation actually described, but by a hundred associations, between the lines—the common, practical, every-day world in which he himself is living and moving, he is naturally impatient of such phenomena as clocks that strike twelve, midnight tappings on the window, ghosts' avenues, departed spirits, and Lady Blessington's crystal. These things may indeed be presented with such power as entirely to overwhelm the reluctant imagination. But it does not seem to us that they are so presented in *David Elginbrod*. In reading *The Portent* we yield ourselves up to the glamour as absolutely as Lady Cassillis in the ballad. There is nothing superfluous, nothing incongruous or disenchanting, nothing to disturb the perfect unity of impression, which is the charm and power of the book. In reading *David Elginbrod* we are never induced to forget for a moment our experience of the natural order of things. The mysteries themselves, apart from their purpose, seem to be out of harmony with their more familiar surroundings. This effect is increased by the incompleteness of the greater number of the characters, who are the subjects of the preternatural part of the story. Mr. Mac Donald's powers are fitted for anything rather than the representation of such lively, graceful, superficial young women of the world as

Euphra Cameron. It is no blame to him that he lacks that quickness of eye for the lighter shades of character, by means of which Mr. Trollope makes drawing-room novels; as, indeed, it is no blame to Mr. Trollope that he sees nothing further in men or women than the superficial intercourse of society reveals to him. Euphra Cameron in Mr. Trollope's hands would have been a coquette, as easy, graceful, and natural as half-a-hundred of the girls who figure in his long string of novels. There are deeper elements, even in Euphra, than Mr. Trollope sees in anybody. But her talk and manner, and her mode of flirting, are not drawn to the life as he would have done it. Mr. Mac Donald makes her a coquette, but it must be admitted that he does not make her either very easy or very natural. She is the niece of a rich country gentleman, with whom she lives. Hugh Sutherland, the hero, comes to be tutor to the Squire's son; and these four live together in the great old country house of Arnstead. We have seen the effect with which Mr. Mac Donald, in one department of fiction, represents the growth and formation of character, by means of the early associations of locality and habit. But when those associations are the conventionalities of society, he is by no means so felicitous in detecting them, as when he is engaged in representing the influence of solitary mountains, romantic legends, and superstitious dreams. In such a group as we have mentioned, it is through the most volatile trifles, little traits of manner and breeding, and social trivialities of a hundred kinds, that the characters begin to influence one another, and make themselves known to the reader. These things Mr. Mac Donald has little capacity for perceiving. His genius is not, indeed, limited to the representation of dreamers and ghost-seers, isolated from the society of ordinary people. Man with him is anything but a solitary being. But the society in which he can make his characters move with ease is much more simple and homely, much broader and more direct in the expression of its sentiments, than that in which such people as Euphra are to be met with. Euphra's manœuvring, accordingly, is a great deal too downright, her social tactics are too cumbersome, and the lighter parts of the character are drawn almost coarsely, without the character itself being vivid or complete. Euphra's uncle, Mr. Arnold, a pompous, narrow-minded, but well-bred and upright English squire, is also both harshly and vaguely drawn, and all the more commonplace characters of the book are rather ineffective. Mr. Mac Donald dislikes carica-

ture, and has little capacity for catching the traits that attract the caricaturist. Probably for that very reason he seldom attempts to describe them, without himself falling into a species of caricature, that, besides being just a little clumsy, is a great deal too full of humanity to be either very significant or very amusing. This defect is characteristic of his genius; and he has told us himself how it happens to be so. It would be difficult, indeed, to describe his peculiar power of drawing character, or its special limitations, better than in the words which he has put into the mouth of a high-minded, but somewhat shadowy personage, who, in the third volume of *David Elginbrod*, comes down *ex machina* to wind up the story. "As far as I can help it," says the mysterious Falconer, "I never have any merely business relations with any one. I try always not to forget that there is a deeper relation between us. I commonly succeed worst in a drawing-room; yet even there, for the time we are together, I try to recognise the present humanity, however much distorted or concealed." Mr. Mac Donald, in this respect, resembles Falconer. He is too entirely possessed by his conception of the essential nature of the men and women he is depicting, to have an eye for such external trivialities of demeanour and breeding as conceal, instead of illuminating, the humanity within; but, to make up for the deficiency, he has shown himself capable of depicting a really great and simple character with a power that has been equalled by one living novelist alone, and in a manner that is perfectly original. It is in such a character that the interest of *David Elginbrod* is centred. Mr. Mac Donald's greatest achievement is the character of David Elginbrod himself.

David is a Scottish peasant; and in the delineation of Scottish peasants, no one but Sir Walter Scott has equalled Mr. George Mac Donald. But it is only in the truth of his pictures of the poor, and not in the least in his manner of delineation, that our author resembles his mighty predecessor. There are elements in the character of David Elginbrod that Sir Walter seldom touches, and never with the depth and fulness with which Mr. Mac Donald loves to dwell upon them. The quiet humour of the man, his sagacity, his grave and massive character, his self-respect and sober dignity, Sir Walter would have depicted with a freshness and ease which it is no disparagement to Mr. Mac Donald to say that he does not approach. But the probing and inquiring intellect of this Scottish labourer, his profound and beautiful spiritual nature, and his re-

ligious faith, do not belong to the region in which Sir Walter's characters are wont to move. If we are to seek for a parallel to those characteristics in English fiction, we must go to a novelist who, in dramatic genius, unquestionably surpasses our author—the only novelist who approaches either Sir Walter or Mr. Mac Donald in ability to describe the poor—George Eliot.

Such a man might seem to have little in common with the spiritual puerilities to which we have referred. But the truth is, they are introduced into the book at all, only to give point and edge to the lesson which his character is calculated to teach. Euphra Cameron is a young lady of nervous constitution, a somnambulist, who has become subject to the influence of a German impostor, Von Funkelstein. This charlatan is anxious to obtain possession of an ancient crystal ring, an heirloom belonging to Mr. Arnold. He throws Euphra into a mesmeric sleep, and forces her, in that condition, to steal the ring from a desk where it has been placed by Hugh Sutherland, in whose custody it happens to be for the moment. At the same time he steals a more valuable ring, a diamond belonging to Sutherland himself. To give opportunity for these thefts, he inspires the whole Arnstead household with all sorts of ghostly terrors, partly by very commonplace trickery, and partly by a really successful *séance*, in which the usual spiritual phenomena are exhibited in very unusual perfection. The loss of the ring, the causes of which cannot be explained to Mr. Arnold, leads to Hugh's losing his situation as tutor. He goes to London to live, as he can, by literature and teaching; and there he falls in with Falconer, who helps him, as we have already hinted, to end the story by discovering Funkelstein, and forcing him to disgorge both crystal and diamond. None of these things take place till after the death of David Elginbrod. But he too has a spiritual power, though he has left the earth, over those who remain in it. Euphra is wretched under the tyranny of Funkelstein, who, though he had promised to trouble her no more, if she could only procure the crystal, of course disregarded his promise; and it is Margaret Elginbrod, David's daughter, who shows her at length how to resist Von Funkelstein's will, assert her freedom, and break her bonds. Margaret is her maid, or her friend's maid; and she cures Euphra in the way in which Mr. Mac Donald is anxious to impress upon his readers, that all sorts of sickly superstitions may be cured by those who desire to be rid of them. She tells her what manner of man her father was, and

enables her to understand that the only mode of escape from thralldom to an evil will is in subjection to the divine will, and that nothing can set a man free from superstition excepting belief. *Wo keine Götter sind walten Gespenster*—"Where gods are not spectres rule," says Mr. Mac Donald. And accordingly, the great design of his book, if we read it aright, is to contrast the true spiritual world, with which all of us, whether we know it or not, are at some time or other brought into communion, with the silly and vulgar mockery of a spiritual world which quacks like Funkelstein expound for the benefit of over-excitables unhinged nervous patients like Euphra, and to show at the same time, that the true point of contact between the natural and the supernatural is in the soul of man, and not in the nervous system; not in the morbid credulity which is vexed by unholy spectres, but in the fervent, simple, and manly faith of David Elginbrod.

We have said that there is only one living novelist who has shown an equal capacity for dealing with the spiritual side of human nature with the author of *David Elginbrod*. But even in this respect there is little resemblance between the two writers. For, if George Eliot has as clear a perception of the spiritual element in life as Mr. Mac Donald, and portrays it with equal depth, and with still greater subtlety, she does so, we think, in a spirit that is much more purely artistic than his. It would be absurd to accuse the creator of so many noble and beautiful characters, to say nothing of the meditative depth of moral sentiment which one recognises everywhere throughout her writings, of too sedulously avoiding ethical discrimination. But there is a certain artistic abstinence, rather than indifference, even in those of George Eliot's pictures which most vividly illustrate ethical laws, which contrasts very strikingly indeed with the personal fervour of conviction which it seems to us that Mr. Mac Donald displays. The author of *Seth Bede*, or *Rufus Lyon*, appears to be contemplating the deepest problems of human existence, with infinite depth and penetration indeed, but with a serene self-suppression, which make her reproduction of them none the less impressive and luminous. The author of *David Elginbrod* seems always to be grappling with the same problems at first-hand. Mr. Mac Donald is incapable of abstracting the spiritual life of his character from that by which he feels that his own mind lives. His characters are true pictures, and certainly they are not represented for the mere purpose of enforcing his own religious opinions.

But all his books are saturated with the great ideas of which his mind and heart are full, regarding the relationship of man to God, and of this life to another. It is from these ideas that both character and story derive their significance and beauty. We have said already that their influence is manifest in the slightest of his beautiful fairy-tales, and they are still more powerful and obvious in *David Elginbrod*.

There is a certain criticism, according to which this is a condemnation of *David Elginbrod*. It seems to be supposed that an artist should hold his theories lightly, if he would produce a beautiful work. It is hard that the artist should be denied the faith that gives strength and consolation to other men; and if it be admitted that the whole spiritual and moral nature of man is the fitting subject of artistic delineation, it is difficult to see why the delineation should be less perfect, because the artist himself has experienced the emotions he is trying to describe. A poet writes none the worse love-songs because he has himself been in love. Why should he be less capable of expressing spiritual emotions because they have been known to his own soul? And why should the dramatic imagination be excluded from themes which have inspired so much of the greatest poetry of Christendom, from Dante to Wordsworth and Tennyson?

A novel that is written for the purpose of inculcating a particular view of human life, is likely enough, no doubt, to present a cramped and limited picture of the world; and therefore a harsher and falsier picture than that which springs from the mere delight of a creative imagination in reproducing the life which it has seen and known. But it is one thing to write for the purpose of inculcating morals, and another to be unable to write without suggesting them. Mr. Lewes, in his admirable criticism of *Wilhelm Meister*, mentions, for the purpose of refuting it, a charge by Novalis against the book, that its spirit is that of "artistic atheism." This Mr. Lewes takes to mean that "in *Wilhelm Meister* there is a complete absence of all moral verdict on the part of the author;" and he compares the feeling of many readers towards such simple objective delineation, with the repugnance which he says is felt in evangelical circles to Miss Edgeworth's tales. "Robert Hall," says Mr. Lewes, "confessed that reading Miss Edgeworth hindered him for a week in his clerical functions; he was completely disturbed by her pictures of happy active people without any visible interference of religion—a sensible, and on the whole, healthy world, yet without warnings, with-



out exhortations, without any apparent terror concerning the state of souls." There is a quite unanswerable sneer in the last sentence, but it seems to us that it was not the absence from Miss Edgeworth's novels of terrors, exhortations, and warnings, but of all those higher aspirations and deeper feelings which lay at the base of his own character, that pained Robert Hall. It disturbed him that these things should be excluded from the conception of men and women, which a thoughtful and very sensible woman had formed. His complaint, as Mr. Lewes reports, it, is a perfectly well-founded criticism of the dryness, narrowness, and essential poverty of the moral and spiritual life which Miss Edgeworth delineates. A running commentary of praise and blame is by no means desirable in a novel. But it is not one of Miss Edgeworth's merits, that she spares her readers that didactic accompaniment. If ever there was a novelist who wrote to teach, Miss Edgeworth is one; and a very sensible and virtuous teacher she is. But there is a whole world of emotions which she seems to want the sense for perceiving, and therefore she takes no note of relations which seemed to Robert Hall to be necessarily involved in the circumstances of her story, and to be in themselves much more important than those which she saw more clearly.

We, at least, shall never reproach our author, either for his strong religious feelings or for his profound conceptions of the laws of man's moral and spiritual nature, so long as these feelings and conceptions result in characters like David Elginbrod. David's theology is not the common theology, either of Scotch peasants or of Scotch divines; but it is a very noble and deep theology notwithstanding, and it is certainly the pervading spirit of a very noble character. This is not the place to explain its doctrines, or discuss their soundness; but if any of our readers be at all suspicious of heresy, we venture to console him by the answer with which David replies to a similar suspicion on the part of his excellent wife. He had asked Janet if she believed that ever a serpent spoke. "Hoot, Dawvid," she says, "the deil was in him, ye ken." "The deil a word o' that's in the word itself though," rejoined David, with a smile. "Dawvid," said Janet solemnly, and with some consternation, "ye're no gaein to tell me, sittin' there, 'at ye dinna believe ilka word 'at's prented 'atween the twa brods o' the Bible? What will Maister Sutherland think o' ye?" "Janet, my bonny lass," and here David's eye beamed upon his wife, "I believe as mony o' them as ye do, and may be a wheen mair, my

dawtie; keep your mind easy about that." We have already given one of his dicta, and he says many things as wise and beautiful. Here is a characteristic conversation. Hugh Sutherland is at the time tutor in the family of a Scotch laird, and "the leddy" has annoyed him by some petty persecution:—

"By and by David came in.

"'I'm ower sune, I doubt, Mr. Sutherland'. I'm disturbin' ye.'

"'Not at all,' answered Hugh. 'Besides, I am not much in a reading mood this evening: Mrs. Glasford has been annoying me again.'

"'Poor body! What's she been sayin' noo?'

"Thinking to amuse David, Hugh recounted the short passage between them recorded above. David, however, listened with a very different expression of countenance from what Hugh had anticipated; and, when he had finished, took up the conversation in a kind of apologetic tone.

"'Weel, but ye see,' said he, folding his palms together, 'she hasna' jist had a'thegither fair play. She does na come o' a guid breed. Man, it's a fine thing to come o' a guid breed. They hae a hantle to answer for 'at come o' decent forbears.'

"'I thought she brought the laird a good property,' said Hugh, not quite understanding David.

"'Ow ay, she brocht him gowpenfu's o' siller; but hoo was't gotten? An' ye ken it's no riches 'at I'll mak' a guid breed—'cep' it be o' maggots. The richer cheese the mair maggots, ye ken. Ye maunna speyk o' this; but the mistress's father was weel kent to hae made his siller by fardins and bawbees, in creepin', crafty ways. He was a bit merchan' in Aberdeen, an' aye keptit his thoom weel abint the point o' the elliwan, sae 'at he made an inch or twa upo' ilka yard he sauld. Sae he took frae his soul, and pat intill his sillerbag, an' had little to gie his dochter but a guid tocher. Mr. Sutherland', it's a fine thing to come o' decent fowk. Noo, to luik at yersel': I ken naething aboot yer family; but ye seem at cesicht to come o' a guid breed for the bodily part o' ye. That's a sma' matter; but frae what I ha'e seen—an' I trust in God I'm no' mista'en—ye come o' the richt breed for the min' as weel. I'm no flatterin' ye, Mr. Sutherland'; but jist layin' it upo' ye, 'at gin ye had an honest father and gran'father, an' especially a guid mither, ye hae a heap to answer for; an' ye ought never to be hard upo' them 'at's sun' creepin' creatures, for they canna help it sae weel as the like o' you and me can.'

"David was not given to boasting. Hugh had never heard anything suggesting it from his lips before. He turned full round and looked at him. On his face lay a solemn quiet, either from a feeling of his own responsibility, or a sense of the excuse that must be made for others. What he had said about the signs of breed in Hugh's exterior, certainly applied to himself as well. His carriage was full of dignity, and a certain rustic refinement; his voice was wonderfully gentle, but deep; and slowest when most impassioned. He seemed

to have come of some gigantic antediluvian breed: there was something of the Titan slumbering about him. He would have been a stern man, but for an unusual amount of reverence that seemed to overflow the sternness, and change it into strong love. No one had ever seen him thoroughly angry; his simple displeasure with any of the labourers, the *quality* of whose work was deficient, would go further than the laird's oaths.

"Hugh sat looking at David, who supported the look with that perfect calmness that comes of unconscious simplicity. At length Hugh's eye sank before David's, as he said:

"I wish I had known *your* father, then, David."

"My father was sic a ane as I tauld ye the ither day, Mr. Sutherland'. I'm a' richt there. A puir, simple, God-fearin' shepherd, 'at never gae his dog an ill-deserved word, nor took the skin o' ony puir lammie, wha's woo' he was clippin', atween the shears. He was weel worthy o' the grave 'at he wan till at last. An' my mither was just like, wi' aiblins rather mair heid nor my father. They're her benks maistly upo' the skelf there abune yer ain, Mr. Sutherland'. I honour them for her sake, though I seldom trouble them mysel'. She gae me a kin' o' scunner at them, honest woman, wi' garren' me read at them o' Sundays, till they near scowfist a' the guid 'at was in me by nater. There's doctrine for ye, Mr. Sutherland'!" added David with a queer laugh."

This is what David had told Hugh of his father:—

"It's a sair stroke to bide," said David; 'but it's a gran' thing when a man's won weel throw't. When my father deit, I min' weel, I was sae proud to see him lyin' there, in the cauld grandeur o' deith, an' no man 'at daured say he ever did or spak the thing 'at didna become him, 'at I jist gloried i' the mids o' my greetin'. He was but a puir auld shepherd, Mr. Sutherland', wi' hair as white as the sheep 'at followed him; an' I wat as they followed him, he followed the great Shepherd; an' followed an' followed, till he jist followed Him hame, whaur we're a' boun', an' some o' us far on the road, thanks a' Him!'"

Our extracts from *David Elginbrod* are sufficiently long already; but we must find room for the following:—

"I hae seen a wonnerfu' sicht sin' I saw you, Mr. Sutherland'. I gaed to see an auld Christian, whase body an' brain are nigh worn out. He was never onything remarkable for intellec, and jist took what the minister tellt him for true, an' keepit the guid o't; for his hert was aye richt, an' his faith a hantle stronger than maybe it had ony richt to be, accordin' to his ain opingans; but, hech! there's something far better nor his opingans i' the hert o' ilka God-fearin' body. When I gaed butt the hoose, he was sittin' in's auld arm-chair by the side o' the fire, an' his face lukit dazed like. There was no licht in't but what

cam' noo an' than frae a lowi' the fire. The snaw was driftin' a wee aboot the bit winnock, an' his auld een was fixed upo't; an' a' 'at he said, takin' no notice o' me, was jist, 'The birdies is flutterin'; the birdies is flutterin'.' I spak' till him, an' tried to roose him, wi' ae thing after anither, bit I might as well hae spoken to the door-cheek, for a' the notice that he took. Never a word he spak', but aye, 'The birdies is flutterin'.' At last, it cam' to my min' 'at the body was aye fu' o' ane o' the psalms in particler; an' sae I jist said till him at last: 'John hae ye forgotten the twenty-third psalm?' 'Forgotten the twenty-third psalm!' quo' he; an' his face lighted up in a moment frae the inside; 'The Lord's my shepherd,'—an' I hae followed Him through a' the smorin' drift o' the warl', an' he'll bring me to the green pastures an' the still waters o' His summer-kingdom at the lang last. '*I shall not want.*' An' I hae wanted for naething, naething.' He had been a shepherd himsel' in's young days. An soon he gaed, wi' a kin' o' a personal commentary on the hail psalm frae beginnin' to en', and syne he jist fell back into the auld croonin' sang, 'The birdies is flutterin'; the birdies is flutterin'.' The lict dee'd oot o' his face, an' a' that I could say couldna' bring back the licht to his face, nor the sense to his tongue. He'll sune be in a better warl'. Sae I was jist forced to leave him. But I promised his dochter, puir body, that I would ca' again an' see him the morn's afternoon. It's unco dowie wark for her; for they hae scarce a neebor within reach o' them, in case o' a change: an' there had hardly been a creatur' inside o' their door for a week."

*Alec Forbes of Howglen* is by far the best of Mr. Mac Donald's novels. It has no character so entirely noble as *David Elginbrod*; but there is at least one as impressive and almost as grand; and Thomas Cramm does not stand, like David, alone in his greatness. There are several others worthy of his companionship, especially Annie Anderson, the heroine, and the blind old woman, Tibbie Dyster. As a story, the book is more coherent than its predecessor, and abundantly proves, what even *David Elginbrod* left rather doubtful, that Mr. Mac Donald, when he chooses, can see men and women of flesh and blood, with just as clear a vision, and describe them as truly and forcibly as the more ethereal creatures of his own imagination. For there is nothing here that is the least fantastic. Excepting one little piece of melodrama, which is painful without being impressive, there is nothing to disturb the simple and truthful tone which characterizes the book.

The story of Annie Anderson's childhood is, to our mind, the sweetest and most touching that has been told for many a day. She is the daughter of a small Scotch farmer, and at a very early age is left an



orphan, and is sent to live with a distant cousin,—a hard, mean, greedy, theological small shopkeeper in a small country town in the North. Her first experience of her new home is characteristic. She is sent to bed in a garret, and without a candle, and has scarcely buried her head under the clothes, when her prayers are interrupted by a terrible noise of scratching and scampering in the room beside her.

"'I tried to cry oot,' she said afterwards, 'for I kent 'at it was rottans; but my tongue booted i' my mou' for fear, and I cudna speak ae word.' The child's fear of rats amounted to a frenzied horror. She did not move a finger. To get out of bed with those creatures running about the room was as impossible as it was to cry out. But her heart did what her tongue could not do—cried out with a great and bitter cry to one who was more ready to hear than Robert and Nancy Bruce. And what her heart cried was this: "O God, tak care o' me frae the rottans." There was no need to send an angel from heaven in answer to this little one's prayer. The cat would do. Annie heard a scratch and a mew at the door. The rats made one frantic scramble and were still. . . . A few moments and she was fast asleep, guarded by God's angel, the cat, for whose entrance she took good care ever after to leave the door ajar."

Next day she goes to the parish school, where boys and girls are taught, and maltreated, by the same savage schoolmaster. There she meets the hero, a manly, generous, good-hearted boy, and the least interesting character in the book; but he is less uninteresting at school than in later life, and he serves the good purpose of illustrating the simple confidence of Annie's character, very much in the same manner as the cat does. He protects her, not certainly from all the miseries of school, but from as many as he can, and becomes in her eyes the best and greatest of heroes. This picture of the parish school, with all its wretchedness, is perhaps the most delightful part of the book. Even in Murdoch Malison, the savage master, whom at first we are naturally disposed to detest, we are taught to find much that is interesting, and something that is pathetic, before we part from him. Glamerton parish school might seem to the hasty reader almost as hateful as Dotheboy's Hall; but Malison in reality, besides being serious, not grotesque, is in other things also, as far as possible from resembling Mr. Squeers. He is a conscientious despot, not a wanton tormentor. His cruelty is partly a savage sense of duty, and partly the consequence of his having nothing of the childlike in himself, so that "he never saw the mind

of the child whose person he was assailing with excruciating blows." But when he suffers punishment himself, he is the better for it; and we know nothing finer in its way than the really tragical history of one great disaster which befalls him. But we have no room to extract the story, and we must not spoil by compressing it. How Malison, in his fury, lames little Truffy, how he fails ignominiously in the pulpit, and becomes "a sticket minister," the tender affection which grows up between pupil and master after this double calamity, and their tragic and beautiful end, our readers will learn for themselves if our word has any weight with them. But, after all, it is Annie herself who gives the great charm. Her *naïveté*, her theological perplexities, and her perfect trustfulness and homely, confiding simplicity, are exceedingly touching; and all the more so for the charming background of natural, healthy child's-play by which she is surrounded, without forming part of it. How Alec and Curly build a boat, while Annie sings to them, is a tale that will charm all boys and girls, and all older people also, who have any relish for simple enjoyment. Notwithstanding all this, there is undoubtedly a certain harshness and sterility in the first aspect of life at Glamerton, a bleakness of atmosphere and meanness of external circumstance that is almost depressing to the reader who comes to it fresh from the magic beauties of *Phantastes*; but it is impossible to go very far without perceiving that, after all, there is a greater wealth and fullness of life in this real world, than there was in the imaginary. The cold grey atmosphere takes warmth and colour, the narrow interests grow larger and wider, and we are forced to admit that external limitations may have very little power of circumscribing the beauty and power of human life. And this effect is not produced by the slightest departure from the homely simplicity, or perfect truth, of the picture. Masons, carpenters, and farm-servants are the principal characters, and Mr. Mac Donald does not attribute to them a wider experience or greater knowledge than they are likely to have attained. But he does not hesitate to ascribe to them strong natures and fine thoughts. There is a depth and solemnity, as we have said, in the character of Thomas Crann, worthy of the author of *David Elginbrod*. He has a great deal of sagacity, and wisdom, although of a lower order than the wisdom of David. His theology is much narrower than that of David. He is a member of the "Missionar Kirk," and a rigid Calvinist; but his gloomy opinions and severe judgment, both of himself

and other men, are not inconsistent with an infinite depth of tenderness, with which we are very gradually permitted to become acquainted. There is a sober and masculine strength of character in him, as in a good many Scotchmen both of his own rank, and a higher, which hides from the careless observer his strength of feeling. And there can be no question that Mr. Mac Donald is rendering an important service to truth when he shows us how much tenderness and catholic breadth of sympathy is consistent, even with the harsher doctrines of the system that is preached by Thomas Crann and the Missionar' Kirk. For Thomas is anything but a gloomy fanatic. He is an austere man, who comprehends far too clearly the difference between good and evil to slur over the sinfulness, or palter with the misery of himself or his neighbours; or to endure, without just indignation, what he calls "a saft way o' dealin' with eternal truth and perishing men." He has the solid logical intellect, very common in Scotchmen—whether their school-learning be great or little—for which a complete and consistent system has a stronger fascination than deeper and more fruitful truths, which confess their incompleteness. But his system is anything but a mere form of doctrine. It is a part of his very being—the life of his life; and ennobles the practical goodness, of which his days are full. Its severity lends additional brightness to the wonderful gleams of tenderness which every now and then break through; and if, after all, it still appears hard and narrow, he is only another illustration of David Elginbrod's wise saying:—"There is something far better than his opinions in the heart of every God-fearing body." That, indeed, is a saying which Mr. Mac Donald never forgets, in his picture of those northern Puritans. Opinions, feelings, and professions in regard to religion, form so large a part of the lives of the people he is describing, that it is impossible to give any true picture of their character, and give these things the go-by. And Mr. Mac Donald's genius and temperament exactly fit him for dealing with this most profound, and intricate, of all regions of the human mind. Other authors before him have given us pictures of devotion, but we know no one who has represented, with greater power and beauty, such widely different spiritual emotions. Nothing can be finer in this way than his picture of the conflict between spontaneous feeling and traditional teaching, the religion of love and the religion of fear, in the troubled spirit of little Annie Anderson, unless, indeed, it be the still more marvellous blending of those mighty opposites in Thomas

Crann. Mr. Mac Donald has not shrunk in delineating the religious life of his characters, from doing so in the only way in which it was possible, and showing us the attitude of their souls towards God, as well as towards their fellow-men. He has not hesitated to tell us how his people pray; and with what perfect reverence, as well as spiritual truth, he has represented their devotion, our readers may understand from this picture of Thomas Crann. We must premise that he is just recovering from a broken leg:—

"A deacon of the church, a worthy little weaver, had been half-officially appointed to visit Thomas, and find out, which was not an easy task, if he was in want of anything. When he arrived Jean was out. He lifted the latch, entered, and tapped gently at Thomas's door—too gently, for he received no answer. With hasty yet hesitating imprudence, he opened the door and peeped in. Thomas was upon his knees by the fireside, with his plaid over his head. Startled by the weaver's entrance, he raised his head, and his rugged leonine face, red with wrath, glared out of the thicket of his plaid upon the intruder. He did not rise, for that would have been a task requiring time and caution. But he cried aloud in a hoarse voice, with his two hands leaning on the chair, like the paws of some fierce rampant animal:

"'Jeames, ye're takin' the pairt o' Sawtan upo' ye, drivin' a mau frae his prayers!'

"'Hoot, Thamas! I beg yer pardon,' answered the weaver, rather flurried; 'I thought ye might hae been asleep.'

"'Ye had no business to think for yersel' in sic a maitter. What do ye want?'

"'I jist cam' to see whether ye war in want o' onything, Thamas.'

"'I'm in want o' naething. Gude-nicht to ye.'

"'But, raily, Thamas,' expostulated the weaver, emboldened by his own kindness—'ye'll excuse me, but ye hae nae business to gang doon on yer knees, wi' yer leg in sic a weyk condection.'

"'I winna excuse ye, Jeames. What ken ye about my leg? And what's the use o' knees, but to gang doon upo'?' Gang hame, and gang doon upo' yer ain, Jeames; and dinna disturb ither fowk that ken what theirs was made for.'

"Thus admonished, the weaver dared not linger. As he turned to shut the door, he wished the mason good-night, but received no answer. Thomas had sunk forward upon the chair, and had already drawn his plaid over his head.

"But the secret place of the Most High will not be entered after this fashion; and Thomas felt that he was shut out. . . .

"He knelt still and sighed sore.

"At length another knock came, which, although very gentle, he heard and knew well enough.

"'Who's there?' he asked, notwithstanding, with a fresh access of indignant feeling.

"'Annie Anderson,' was the answer through the door, in a tone which at once soothed the ruffled waters of Thomas's spirit.

"Come in," he said.

"She entered, quiet as a ghost.

"Come awa', Annie. I'm glad to see ye. Jist come and kneel doon aside me, and we'll pray thegither, for I'm sair troubled wi' an ill-temper."

"Without a word of reply, Annie kneeled by the side of his chair. Thomas drew the plaid over her head, took her hand, which was swallowed up in his, and after a solemn pause, spoke thus:

"O Lord, wha dwellest in the licht inaccessible, whom mortal eye hath not seen nor can see, but who dwellest with him that is humble and contrite of heart, and liftest the licht o' thy countenance upo' them that seek it, O Lord,"—here the solemnity of the appeal gave way before the outbursting agony of Thomas's heart—"O Lord, dinna lat's ery in vain, this thy lumnie, and me thine auld sinner, but for the sake o' him wha did no sin, forgive my sins and my vile temper, and help me to love my neighbour as myself. Lat Christ dwell in me and syne I shall be meek and lowly of heart like him. Put thy Speerit in me, and syne I shall do richt—no frae myself, for I hae no good thing in me, but frae thy Speerit that dwelleth in us."

"After this prayer, Thomas felt refreshed and hopeful. With slow labour he rose from his knees at last, and sinking into his chair, drew Annie towards him, and kissed her. Then he said,

"Will ye gang a bit eeran' for me, Annie?"

"That I will, Thomas. I wad rin myself aff o' my legs for ye."

"Na, na. I dinna want sae muckle rinnin' the nicht. But I wad be sair obleeged to ye, gin ye wad jist rin doon to Jeames Johnstone, the weyver, and tell him, wi' my coompliments, ye ken, that I'm verra sorry I spak' till him as I did the nicht; and I wad tak it richt kin' o' him, gin he wad come and tak a cup o' tay wi' me the morn's nicht, and we cud hae a crack thegither, and syne we cud hae worship thegither. And tell him he maunna think nae mair o' the way I spak till him, for I was troubled i' my min', and I'm an ill-nater'd man."

"I'll tell him a' that ye say," answered Annie, "as weel's I can min' t'; and I's warran' I's no forget muckle o' t'. Wad ye like me to come back the nicht and tell ye what he says?"

"Na, na, lassie. It'll be near han' time for ye to gang to yer bed. And it's a cauld nicht. I ken that by my leg. And ye see Jeames Johnstone's no an ill-nater'd man like me. He's a douce man, and he's sure to be weel-pleased and come till's tay. Na, na; ye needna come back. Guid-nicht to ye, my dawtie. The Lord bless ye for comin' to pray wi' an ill-nater'd man."

We must extract also a conversation with Tibbie Dyster. Tibbie has asked him whether there is any likeness between the light "she canna see and that soun' o' rinnin' water she loves so weel to hear."

"Weel, ye see, Tibbie," answered Thomas, "it's nearhan' as ill for the like o' us to unner-

stan' your blin'ness, as it may be for you to unnerstan' oor sicht."

"Deed maybe neyther o' s kens muckle aboot oor ain gift either o' sight or blin'ness.—Say onything ye like, gin ye dinna tell me, as the bairn here ance did, that I cudna ken what the licht was. I kenna what yer sicht may be, and I'm thinkin' I care as little. But weel ken I what the licht is."

"Tibbie, dinna be ill-nater'd, like me. Ye hae no call to that same. I'm tryin' to answer your question. And gin ye interrup' me again, I'll rise an' gang haine."

"Say awa', Thomas. Never heed me. I'm some cankert whiles. I ken that weel enouch."

"Ye hae nae business to be cankert, Tibbie?"

"Nae mair nor ither fowk."

"Less, Tibbie; less, woman."

"Hoo mak' ye that oot?" asked Tibbie, defensively.

"Ye dinna see the things to anger ye that ither fowk sees.—As I cam' doon the street this minute, I cam' upo' twa laddies—ye ken them—they're twins—ane o' them eripple—"

"Ay, that was Murdoch Malison's wark!" interposed Tibbie, with indignant reminiscence.

"The man's been sorry for 't, this mony a day," said Thomas; "sae we maunna come ower 't again, Tibbie."

"Verra weel, Thomas; I s' haud my tongue. What about the laddies?"

"They were fetchin' i' the verra street; raggin' ane anther's heids, an' peggin' at ane anither's noses, an' doin' their verra endeavour to destroy the image o' the Almichty—it wasna muckle o' t' that was left to blaud. I teuk and throosh them baith."

"An' what cam' o' the image o' the Almichty?" asked Tibbie, with a grotesque contortion of her mouth, and a roll of her veiled eye-balls. "I doobt, Thomas," she continued, "ye angert yersel' mair nor ye quaiet it them wi' the thrashin'. The wrath o' man, ye ken, Thomas, worketh not the richtyisness o' God."

"There was not a person in Glamerton who would have dared to speak thus to Thomas Crann but Tibbie Dyster, perhaps because there was not one who had such a respect for him. Possibly the darkness about her made her bolder; but I think it was her truth, which is another word for *lore*, however unlike love the outcome may look, that made her able to speak in this fashion."

"Thomas was silent for a long minute. Then he said:

"Maybe ye're i' the richt, Tibbie. Ye aye anger me; but I wad rather hae a body anger me wi' tellin' me the trowth, nor I wad hae a' the fair words i' the dictionar'. It's a strange thing, wumman, but aye whan a body's tryin' mai't to gang upright, he's sure to catch a droidfu' fa'. There I hae been warstlin' wi' my ill-temper mair nor ever I did i' my life afore; and I never i' my days lickit twa laddies for lickin' ane anither till jist this verra day. And I prayed against myself afore I cam' oot. I canna win at the boddem o' t'."

"There's waur things nor an ill-temper, Thomas."

"'Bnt I'm no gaein' to gie in to bein' ill-natert for a' that,' said Thomas, as if alarmed at the possible consequences of the conclusion.

"'Na, na. Resist ye the deevil, Thamas. Haud at him, man. He's sure to rin at the lang last. But I'm feared ye'll gang awa' ohn tellt me aboot the licht and the water. Whan I'm sittin' here o' the girse, hearkenin' to the water, as it comes murrin', and souffin', and gurglin', on to me, and syne by me and awa', as gin it war spinnin' and twistin' a lot o' bonnie wee sonnies a' intil ae muckle gran' sonn', it pits me i' min' o' the text that says, 'His voice was as the sound o' mony waters.' Noo his face is licht—ye ken that; divna ye?—and gin his voice be liko the water, there maun be something like atween the licht and the water, ye keu. That's wha' garred me spier at ye, Thamas.'

"'Weel, I dinna ken richtly hoo to answer ye, Tibbie; but at this moment the licht 's playin' bonnie upo' the entick—shimmerin' and brakin' upo' the water, as hit braks upo' the stanes afore it fa's. An' what fa's, it luiks as gin it took the licht wi' 't 'i the wame o' t' like. Eh! it's bonnie, woman; and I wiss ye had the sicht o' yer een to see 't wi'; though ye do preten' to think little o' 't.'

"'Weel, weel! my time's comin', Thamas; and I maun jist bide till it comes. Ye canna help me, I see that. Gin I could only open my my een for ae minute, I wad ken a' aboot it, and be able to answer mysel'.—I think we'll gang into the hoose, for I canna bide it langer.'"

After Thomas Crann, the best character is probably Cupples, the College librarian, with a great heart and a weak will and a kind of humour, poetry, scholarship, and habits of drinking, which could certainly be found in such singular combination nowhere except in a Scotch university. We are unwilling to leave the book without affording our readers such a glimpse of him as will induce them to make his better acquaintance for themselves; and the following scene will serve the purpose. He has given up drinking by this time, and has come up to Glamerton to look after Alec.

"Although Mr. Cupples did go to church at Glamerton for several Sundays, the day arriving when he could not face it again, he did not scruple to set off for the hills. Coming home with a great grand purple fox-glove in his hand, he met some of the missionaries returning from their chapel, and amongst the rest Robert Bruce, who stopped and spoke.

"'I'm surprised to see ye carryin' that thing o' the Lord's day, Mr. Cupples. Fowk 'll think ill o' ye.'

"'Weel, ye see, Mr. Bruce, it angert me sae to see the ill-faured thing positeevly growin' there upo' the Lord's day, that I pu'd it up maist by the rect. To think o' a weyd like that prankin' itsel' oot in its purple and its spots upo' the Sawbath day! It canna ken what it's aboot. I'm only feared I left enouch o' 't to be up again afore lang.'

"'I doobt, Mr. Cupples, ye haena come under the poore o' grace yet.'

"'A pour o' creysh (*grease*)! Na, thank ye. I dinna want to come unner a pour o' creysh. It wad blaud me a'thegither. Is that the gait ye baptize i' your conventicle?'

"'There's nane sae deif as them 'at winna hear, Mr. Cupples,' said Bruce. 'I mean—ye're no convertit yet.'

"'Na. I'm no convertit. 'Deed no. I wadna like to be convertit. What wad ye convert me till? A swine? Or a sma' peddlin' crater that tak's a bawbee mair for rowin' up the pigtail in a foul paper? Ca' ye that conversion? I'll bide as I am.'

"'It's waste o' precious time speikin' to you, Mr. Cupples,' returned Bruce, moving off with a red face.

"'Deed is't,' retorted Cupples; 'and I houp ye winna forget the fac'? It's o' consequences to me.'

"But he had quite another word on the same subject for Annie Anderson, whom he overtook on her way to Howglen—she likewise returning from the missionar kirk.

"'Isna that a bonnie ring o' *deid man's bells*, Annie?' said he, holding out the foxglove, and calling it by its name in that part of the country.

"'Ay is 't. But that was ower muckle a floer to tak' to the kirk wi' ye. Ye wad gar the fowk lauch.'

"'What's the richt floer to tak' to the kirk, Annie?'

"'Ow! sober floories that smell o' the yird (*earth*), like.'

"'Ay! ay! Sic like 's what?' asked Cupples, for he had found in Annie a poetic nature that delighted him.

"'Ow! sic like's thyme and southernwood, and maybe a bittie o' mignonette.'

"'Ay! ay! And sae the cowman custom abuses you young bonnie lammies o' the flock? Wadna ye tak' the rose o' Sharon itsel', nor the fire-reid lillies that made the text for the Saviour's sermon? Ow! na. Ye maun be sober, wi' floores bonnie enouch, but smellin' o' the kirkyaird rather nor the blue lift, which same 's the sapphire throne o' Him that sat thereon.'

"'Weel, but allooin' that, ye sudna gar fowk lauch, wi' a bonnie floer, but ridickeous for the size o' 't, 'cep ye gie 't room. A kirk 's ower little for 't.'

"'Ye 're richt there, my dawtie. And I haena been to the kirk ava'. I hae been to the hills.'

"'And what got ye there?'

"'I got this upo' the road hame.'

"'But what got ye there?'

"'Weel, I got the blue lift.'

"'And what was that to ye?'

"'It said to me that I was a foolish man to care aboot the claiks and the strifes o' the warl'; for a' was quiet aboon, whatever stramash they micht be makin' doon here i' the cellars o' the speeritual creation.'

"Annie was silent: while she did not quite understand him, she had a dim perception of a grand meaning in what he said. The fact was

that Annie was the greater of the two *in esse*; Cupples the greater *in posse*. His imagination let him see things far beyond what he could for a long time attain unto."

The result of their conversation with Annie is that Mr. Cupples goes to the Missionar' Kirk.

"As he was walking away, questioning with himself, he heard a voice in the air above him. It came from the lips of Thomas Crann, who, although stooping from asthma and rheumatism, still rose nearly a foot above the head of Mr. Cupples.

"I was glad to see ye at oor kirk, sir," said Thomas.

"What for that?" returned the librarian, who always repelled first approaches, in which he was only like Thomas himself, and many other worthy people, both Scotch and English.

"A stranger sūd aye be welcomed to onybody's hoose."

"I didna ken it was your hoose."

"Ow na. It's no my hoose. It's the Lord's hoose. But a smile frae the servan'-lass that opens the door's something till a man that gangs to ony hoose for the first time, ye ken," returned Thomas, who, like many men of rough address, was instantly put upon his good behaviour by the exhibition of like roughness in another.

"This answer disarmed Cupples. He looked up into Thomas's face, and saw first a massive chin; then a firmly closed mouth; then a nose, straight as a Greek's, but bulky, and of a rough texture; then two keen grey eyes, and lastly a big square forehead supported by the two pedestals of high cheek bones—the whole looking as if it had been hewn out of his professional granite, or rather as if the look of the granite had passed into the face that was so constantly bent over it fashioning the stubborn substance to the yet more stubborn human will. And Cupples not only liked the face, but felt that he was in the presence of one of the higher natures of the world—made to command, or rather, which is far better, to influence. Before he had time to reply, however, Thomas resumed:—

"Ye hae had a heap o' tribble, I doobt, wi' that laddie, Alec Forbes."

"Naething mair nor was nateral," answered Cupples.

"He's a fine crater, though. I ken that weel. Is he come back, do ye think?"

"What do you mean? He's lyin' in 's bed, quiet enuech, pair fallow!"

"Is he come back to the fold?"

"Nae to the missionars, I'm thinkin'."

"Dinna anger me. Ye're nae sae ignorant as ye wad pass for. Ye ken weel enuech what I mean. What care I for the missionars mair nor ony ither o' the Lord's fowk, 'cep that they are mair like his fowk nor ony ither that I hae seen?"

"Sic like's Robert Bruce, for a sample."

"Thomas stopped as if he had struck against a stone wall, and went back on his track.

"What I want to ken is whether Alec unnerstans yet that the prodigal's aye ill aff; and—"

"Na," interrupted Cupples. "He's never been cawed to the swine yet. Nor he sūdna be, sae lang's I had a saxpence to halve wi' him."

"Ye're no richt, frien', *there*. The sūner a prodigal comes to the swine the better!"

"Ay; that's what you richteous elder brithers think. I ken that weel enuech."

"Mr. Cupples, I'm nae elder brither?" that sense. God kens I wad gang oot to lat him in."

"What ken ye aboot him, gin it be a fair question?"

"I hae kent him, sir, sin he was a bairn. I perilled his life—no my ain—to gar him do his duty. I trust in God it wad hae been easier for me to hae perilled my ain. Sae ye see I do ken aboot him."

"Weel," said Mr. Cupples, to whom the nature of Thomas had begun to open itself, "I alloo that. Whaur do ye bide? What's yer name? 'I'll come and see ye the morn's nicht, gin ye 'll lat me."

This further talk between Thomas and Cupples is characteristic of both:—

"There's a few signs o' decrepitude, no to say degeneracy, am' ye, isna there?"

"I maun alloo that. At the first, things has a kin' o' a swing that carries them on. But the sons an' the dochters dinna care sae muckle aboot them as the fathers and mithers. Maybe they haena come throw the hards like them."

"And syne there'll be ane or twa cruppon in like that chosen vessel o' grace they en' Robert Bruce. I'm sure he's enuech to ruin ye i' the sight o' the warl', hoover yon and he may fare at heidquarters, bein' a' called and chosen thegither."

"For God's sake, dinna think that sic as him gies ony token o' bein' ane o' the elec."

"Hoo wan he in than? The say ye're unco particular. The Elec sūd ken an elec."

"It's the siller, man, that blin's the een o' them that hae to sit in jeedgment upo' the applicants. The crater professed, and they war jist ower willin' to believe him."

"Weel, gin that be the case, I dinna see that ye're sae far aheid o' fowk that disna mak' sae mony pretensions."

"Indeed, Mr. Cupples, I fully doobt that the displeesur o' the Almighty is restin' upo' oor kirk; and Mr. Turnbull, honest man, appears to feel the wacht o' 't. We hae maer than ae instance i' the Scriptur o' a hail community sufferin' for the sin o' ane."

"Do ye ken ony instance o' a gude man no bein' able to win in to your set?"

"Ay, ane, I think. There was a fule body that wantit sair to sit doon wi' 's. But what eud we do? We eudna ken whether he had savin' grace or no, for the body eudna speyk that a body eud unnerstan' him."

"And ye didna lat him sit doon wi' ye?"

"Na. Hoo eud we?"

"The Lord didna dee for him, did he?"

"We cudna tell."

"And what did the pair cratur do?"

"He grat' (*weep.*)"

"And hoo cam' ye to see that ye wad hae been a' the better o' a wee mair pooer to read the heart?"

"Whan the cratur was deen' the string o' his tongue, whether that string lap in his mou', or in his brain, was lousened, and he spak' plain, and he praised God."

"Weel, I cannot see that your plan, haudin' oot innocents that lo'e Him, and lattin' in thieves that wad steal oot o' the Lord's ain bag—gie them a chance—can be an impruvment upo' the auld fashion o' settin' a man to judge himsel', and tak the wyte o' the jeedgment upo' 's ain shouthers."

We have said very little about the story of *Alec Forbes*: for its real value consists in its characters, and not in plot. So far as there is any story at all, its interest is in the history of the growth of character. His men and women are alive, and go through a continual process of development. This is a rare merit in modern novels, and we might have illustrated it at greater length. But our space is exhausted. We have given a very inadequate account of a very original writer. But we have said enough, and quoted enough, to show what a rich and delicate imagination, informed by a moral thoughtfulness how profound, Mr. Mac Donald has brought to the art of writing fiction.

## ART. II.—SIR WILLIAM ROWAN HAMILTON.

WITH the din of controversy ringing in our ears, as the battle of intellectual giants sways now onward and anon back, it is soothing to turn to something of a loftier character. When Homer has had enough of ghastly gashes, described with sickening fidelity and most impartial relish, whether they be inflicted by Achæan or Trojan, his fancy soars to Olympus, where a more imposing but less numerous group, withal strangely resembling in their peculiarities the inferior race, are employed in those calmer discussions which suit their exalted nature. Let us for a while forsake the task of following the keen intellect of a Lowe or a Newman (too often employed in merely bewildering minds of a stamp inferior to their own), and seek repose in the contemplation of something far more elevated and much more subtle,—the character and works of a man of *genius*.

This term we use, of course, in the most strict and exclusive sense. Unfortunately,

like such terms as "gentleman," "esquire," etc., etc., it has in modern days been far too laxly employed. There would be no inconvenience in this had we any higher term to apply to those extraordinary instances which are above everyday comparisons, and in fact furnish themselves the only standard by which they can be measured. We think we may assume that real genius always makes itself known; for it is scarcely conceivable that when, as happens some score or two of times in a century, a human being is endowed with it, he should fail to make his way to the very foremost rank, not merely in his own country, but in the world. For genius is something of a loftier order than the lucid, logical, and quick-witted intelligence of the barrister or the mathematician; it involves essentially an unusual amount of the creative or originitive power, and it was in this sense that the ancients regarded the higher flights of the imagination; as the term "poet" remains to testify in most civilized languages.

But if to genius be added enormous erudition and untiring energy, we can hardly set limits to our expectations of what its possessor may achieve, if but life and health be granted to him. When such a phenomenon (as he may well be called) occurs, it behooves us common mortals to study and examine him. Everything about him, even, or perhaps especially, his peculiarities, is deserving of the most careful attention.

Scotland has had such men. In the words of one of the most remarkable of them—

"Yet Caledonia claims *some* native worth,  
As dull Bœotia gave a Pindar birth;"

few, of course, in actual number, because they are everywhere rare; but many, when her small population is considered. Such a list as Napier, Watt, Scott, Hunter, Black, Maclaurin, and Cochrane, though perhaps not including even all of the very first rank, forms a galaxy nowhere to be surpassed. But, besides these undoubted Scotsmen, there are others, such as Byron for instance, who are only not Scottish by a sort of legal fiction. This was the case with Hamilton, whose name will not only rank with any in the foregoing list, but will undoubtedly be classed with those of the grandest of all ages and countries, such as Lagrange and Newton.

His grandfather came over from Scotland to Dublin with two young sons, of whom Archibald became a solicitor in Dublin, James the curate of Trim, county Meath. A branch of the Scottish family to which they belonged had settled in the north of Ireland in the time of James I., and this seems to have given rise to the common im-



pression that Hamilton was an Irishman. Archibald married a relative of the celebrated Dr. Hutton, and their son, WILLIAM ROWAN HAMILTON, was born in Dublin on the 4th of August 1805. He displayed great talent at a very early age, and when barely *three* was given in charge to his uncle, who seems to have at once commenced to teach him Hebrew. He made such progress that, at the age of seven, he was pronounced by one of the Fellows of Trinity College, Dublin, to have shown a greater knowledge of the language than many candidates for a Fellowship. At the age of thirteen he had acquired considerable knowledge of at least thirteen languages. Among these, besides the classical and the modern European languages, were included Persian, Arabic, Sanscrit, Hindustani, and even Malay. This singular direction seems to have been given to his studies, partly by the natural bent of his teacher, and partly because his father intended him for the service of the East India Company. He wrote, at the age of fourteen, a complimentary letter to the Persian Ambassador, who happened to visit Dublin; and the latter said he had not thought there was a man in Britain who could have written such a document in the Persian language. Some idea of the nature of his knowledge of these languages may be gathered from the following extract from a letter of his, dated 1859: "I never learned the [German] language as accurately as I did Greek, or Latin, or Hebrew, or Syriac, or Persian (when I was a boy), and am always fancying that I have quite forgotten it (the German aforesaid), until I take up some book or article, and become interested. I have to *think* of the difference between the significations of the words *Kegel* and *Kugel*!" From this time his mathematical tastes seem to have considerably interfered with his study of languages; and though to the end of his life he retained much of the extraordinary learning of his childhood and youth, often reading Persian and Arabic in the intervals of sterner pursuits, he had long abandoned them as a study, and employed them merely as a relaxation.

His mathematical studies seem to have been undertaken and carried to their full development without any assistance whatever, and the result is that his writings belong to no particular "school," unless, indeed, we consider them to form, as they are well entitled to do, a school by themselves. As an arithmetical calculator he was not only wonderfully expert, but he seems to have occasionally found a positive delight in working out to an enormous number of places of decimals the result of some irksome calculation. It is probably to his powers of mental arith-

metie that a relative of his refers when she says: "I remember him a little boy of six, when he would answer a difficult mathematical question, and run off gaily to his little cart." At twelve he engaged Colburn, the American "calculating boy," who was then being exhibited as a curiosity in Dublin, and he had not always the worst of the encounter. But, two years before, he had accidentally fallen in with a Latin copy of Euclid, which he eagerly devoured; at twelve he attacked Newton's *Arithmetica Universalis*. This was his introduction to modern analysis. He soon commenced to read the *Principia*, and at sixteen he had mastered a great part of that work, besides some more modern works on Analytical Geometry and the Differential Calculus. We give an extract from a letter written by him about this period to his cousin, a young lady, as it shows not only what he was then engaged upon, but how his work impressed him, and prepares us for some of the more striking qualities which he manifested at a later period:—

TRINITY, October 9, '21.

" . . . Since I came down . . . I have been principally employed in reading Science. In studying Conic Sections and other parts of Geometry, I have often been struck with the occurrence of what may be called demonstrated Mysteries,—since, though they are proved by rigidly mathematical proof, it is difficult, if not impossible, to conceive how they can be true. For instance, it is proved that the most minute line can be divided into an infinite number of parts; and that there can be assigned two lines (the Hyperbola and its asymptote), which shall continually approach without ever meeting, although the distance between them shall diminish within any assignable limits.

"If, therefore, within the very domain of that Science which is most within the grasp of human Reason—which rests on the firm pillars of Demonstration, and is totally removed from doubt or dispute, there be truths which we cannot comprehend, why should we suppose that we can understand everything connected with the Nature and Attributes of an Infinite Being? For, if ye understand not Earthly things, how shall ye those that are Heavenly?"

About this time he was also engaged in preparation for entrance at Trinity College, Dublin, and had therefore to devote a considerable portion of his time to classics. In the summer of 1822, in his seventeenth year, he began a systematic study of Laplace's *Mécanique Céleste*. Nothing could be better fitted to call forth such mathematical powers as those of Hamilton, for Laplace's great work, rich to profusion in analytical processes alike novel and powerful, demands from the most gifted student careful and often laborious study. It was in the successful effort to

open this treasure-house that Hamilton's mind received its final temper. "*Dès-lors il commença à marcher seul,*" to use the words of the biographer of another great mathematician. From that time he appears to have devoted himself almost wholly to original investigation (so far at least as regards mathematics), though he ever kept himself well acquainted with the progress of science both in this country and abroad.

Having detected an important defect in one of Laplace's demonstrations, he was induced by a friend to write down his remarks, that they might be shown to Dr. Brinkley (afterwards Bishop of Cloyne, but) who was then Royal Astronomer of Ireland, and an accomplished mathematician. Brinkley seems at once to have perceived the vast talents of young Hamilton, and to have encouraged him in the kindest manner. He is said to have remarked, in 1823, of this lad of eighteen,—"This young man, I do not say *will be*, but *is*, the first mathematician of his age." And their regard was mutual, for Hamilton always mentions his predecessor with esteem and gratitude. Thus, at the conclusion of the earliest paper he presented to the Royal Irish Academy, he says: "Whatever may be the opinion of others as to its value, I have the pleasure to think that my paper is inscribed to the one who will best be able to perceive and appreciate what is original; whose kindness has encouraged, whose advice has strengthened me; to whose approbation I have ever looked as to a reward sufficient to repay me for industry however laborious, for exertion however arduous." We shall presently see how well these terms are applicable to the grand investigation to which they are appended.

Hamilton laid before Dr. Brinkley, at their first interview, besides the observations on Laplace already mentioned, some original investigations in analytical geometry, connected with the contact of curves and surfaces, and with pencils of rays. He writes to a friend, in 1858, as follows:—"In one of those unpublished papers, which (when I was quite a boy) attracted the notice of Dr. Brinkley, and won for me a general invitation to breakfast here (the Observatory), which I often walked out from Dublin to avail myself of . . .," and from this we see how genially this intimacy was commenced. It was of very great consequence to Hamilton, for Brinkley read his papers carefully, approved especially of the optical one, and requested him to develop it further. This was done about a month after, but neither of these papers has yet been published.

Hamilton had now entered college, and

his career there was perhaps unexampled. Amongst a number of competitors of more than ordinary merit, he was first in every subject, and at every examination. His is said to be the only recent case in which a student obtained the honour of an *optimé* in more than one subject. This distinction had then become very rare, not being given unless the candidate displayed a thorough mastery over his subject. Hamilton received it for Greek and Physics. How many more such honours he might have attained it is impossible to say; but he was expected to win both the gold medals at the Degree Examination, had his career as a student not been cut short by an unprecedented event. This was his appointment to the Andrews Professorship of Astronomy in the University of Dublin, vacated by Dr. Brinkley in 1827. The chair was not exactly *offered* to him, as has been sometimes asserted; but the electors, having met and talked over the subject, authorized one of their number, who was Hamilton's personal friend, to urge him to become a candidate, a step which his modesty had prevented him from taking. Thus, when barely twenty-two, he was established at the Dublin Observatory. He was not specially fitted for the post, for, although he had a profound acquaintance with theoretical astronomy, he had paid but little attention to the regular work of the practical astronomer. And it must be said that his time was better employed for himself, his university, and his race, in grand original investigations, than it would have been had he spent it in meridian observations made even with the best of instruments; infinitely better than if he had spent it on those of the Observatory, which, however good in their day, are totally unfit for the delicate requirements of modern astronomy. Indeed there can be little doubt that Hamilton was intended, by the University authorities who elected him to the professorship of Astronomy, to spend his time as he best could for the advancement of science, without being tied down to any particular branch. Had he devoted himself to practical astronomy, they would assuredly have furnished him with modern instruments and an adequate staff of assistants.

But the official duties of the Andrews professor are not confined to the Observatory. He lectures and examines in Trinity College. And in this part of his work Hamilton was unsurpassed, and perhaps unsurpassable. His lectures, sometimes on astronomy, even in its most popular form, anon on his own grand inventions of the hodograph and the quaternion, were admirably lucid, and are said to have almost fascinated his audience. And his examination papers were the despair of



the "crammers." In them there was such an intense novelty and originality, that the experience of forty years could give no inkling of what was coming; the venerable crammers gave up the attempt; and the victory was won by the real *intellect* of the deserving candidate, not, as it too often is, by the adventitious supply of old material forced into the mere *memory* of the crammed.

In 1835, being Secretary to the meeting of the British Association, which was held that year in Dublin, he was knighted by the Lord-Lieutenant. But far higher honours rapidly succeeded, among which we may merely mention his election in 1837 to the President's chair in the Royal Irish Academy, and the rare and coveted distinction of being made Corresponding Member of the Academy of St. Petersburg. These are the few salient points (other, of course, than the epochs of his more important discoveries and inventions presently to be considered) in the uneventful life of this great man. Retaining his wonderful faculties unimpaired to the very last, and steadily continuing till within a day or two of his death the task which had occupied the last six years of his life, he died as he had lived, a sincere and humble Christian. He was but sixty years old. What might not that mighty genius have done in a few more years, is a question which all will ask who come to know what he had done for quaternions, and at what a stage in their progress he was removed. He lived long enough so to develop them that their future career is certain; but it is sad to think that he is not to pioneer their next grand and inevitable advance.

In such an article as this we must restrict ourselves to the more important only, or the more distinctive, of Hamilton's discoveries; and in noticing them, and explaining in a brief and popular manner their nature and their applications, we shall adhere, not strictly, but as nearly as possible, to the chronological order.

The germ at least of his first great discovery was contained in one of those early papers which in 1823 he communicated to Dr. Brinkley. We have already mentioned that Hamilton had considerably developed it; and, under the title of "Caustics," this paper was presented in 1824, by Brinkley, to the Royal Irish Academy. It was referred, as usual, to a committee. Their report, while acknowledging the novelty and value of its contents, and the great mathematical skill of its author, recommended that before being published, it should be still further developed and simplified by its author. During the next three years the paper grew to an immense bulk, principally by the additional details which had been in-

serted at the desire of the committee. But it also assumed a much more intelligible form, and the grand features of the new method were now easily seen. Hamilton himself seems not till this period to have fully understood either the nature or the importance of his discovery, for it is only now that we find him announcing his intention of applying his method to dynamics. The paper was now entitled *Theory of Systems of Rays*, and the first part was printed in 1828 in the Transactions of the Royal Irish Academy. The second and third parts have not yet been printed; but it is understood that their more important contents have appeared in the three voluminous *Supplements* to the first part which have been published in the Transactions of the Royal Irish Academy, and in the two papers, *On a General Method in Dynamics*, which appeared in the Philosophical Transactions in 1834-5.

To give the popular reader an idea of the nature of the great step taken by Hamilton in these papers is by no means easy, but we may make an attempt. We commence with an extract from an elementary article of his (*Dublin University Review*, October 1833), not merely because it forms a good introduction to the subject, and gives us some of his own views of his discovery, but also because it is a favourable specimen of his peculiar style:—

"For the explanation of the laws of the linear propagation of light, two principal theories have been proposed, which still divide the suffrages of scientific men.

"The theory of Newton is well known. He compared the propagation of light to the motion of projectiles; and as, according to that First Law of Motion, of which he had himself established the truth by so extensive and beautiful an induction, an ordinary projectile continues in rectilinear and uniform progress, except so far as its course is retarded or disturbed by the influence of some foreign body; so, he thought, do luminous and visible objects shoot off luminous or light-making projectiles, which then, until they are accelerated or retarded, or deflected one way or another, by the attractions or repulsions of some refracting or reflecting medium, continue to move uniformly in straight lines, either because they are not acted on at all by foreign bodies, or because the foreign actions are nearly equal on all sides, and thus destroy or neutralize each other. This theory was very generally received by mathematicians during the last century, and still has numerous supporters.

"Another theory, however, proposed about the same time by another great philosopher, has appeared to derive some strong confirmations from modern inductive discoveries. This other is the theory of Huygens, who compared the gradual propagation of light, not to the

motion of a projectile, but to the spreading of sound through air, or of waves through water. It was, according to him, no *thing*, in the ordinary sense, no *body* which moved from the sun to the earth, or from a visible object to the eye; but a *state*, a *motion*, a *disturbance*, was first in one place, and afterwards in another. As, when we hear a cannon which has been fired at a distance, no bullet, no particle even of air, makes its way from the cannon to our ears; but only the aerial motion spreads, the air near the cannon is disturbed first, then that which is a little farther, and last of all the air that touches us. Or like the waves that spread and grow upon some peaceful lake, when a pebble has stirred its surface; the floating water-lilies rise and fall, but scarcely quit their place, while the enlarging wave passes on and moves them in succession. So that great ocean of ether which bathes the farthest stars, is ever newly stirred, by waves that spread and grow, from every source of light, till they move and agitate the whole with their minute vibrations: yet like sounds through air or waves on water, these multitudinous disturbances make no confusion, but freely mix and cross, while each retains its identity, and keeps the impress of its proper origin. Such is the view of Light which Huygens adopted, and which justly bears his name: because, whatever kindred thoughts occurred to others before, he first showed clearly how this view conducted to the laws of optics, by combining it with that essential principle of the undulatory theory which was first discovered by himself, the principle of accumulated disturbance.

"According to this principle, the minute vibrations of the elastic luminous ether cannot perceptibly affect our eyes, cannot produce any sensible light, unless they combine and concur in a great and as it were infinite multitude; and on the other hand, such combination is possible, because particular or secondary waves are supposed in this theory to spread from every vibrating particle, as from a separate centre, with a rapidity of propagation determined by the nature of the medium. And hence it comes, thought Huygens, that light in any one uniform medium diffuses itself only in straight lines, so as only to reach those parts of space to which a straight path lies open from its origin; because an opaque obstacle, obstructing such straight progress, though it does not hinder the spreading of weak particular waves into the space behind it, yet prevents their accumulation within that space into one grand general wave, of strength enough to generate light. This want of accumulation of separate vibrations behind an obstacle, was elegantly proved by Huygens: the mutual destruction of such vibrations by interference, is an important addition to the theory, which has been made by Young and by Fresnel. Analogous explanations have been offered for the laws of reflexion and refraction."

In the time of Euclid it was known that light moves in general in straight lines, and the law of its reflexion was known. So far, therefore, the necessary data for the solu-

tion of any optical problem involving any number of successive reflexions were known. But though it was easy enough to apply them to the solution of a particular problem, to found a science on such data was not an easy matter. Huyghens, indeed, was led by the principles of the undulatory theory to make one very general statement. Suppose light to diverge in air from a luminous point, each wave is a sphere surrounding the point as centre, and each ray being a radius of the sphere cuts it at right angles. Thus a series of rays proceeding from a single point have the property of being all cut perpendicularly by a set of surfaces (in this simple case, concentric spheres). After reflexion at a plane mirror, we know that the rays all diverge *as if they came* from another point, which is called the image of the luminous point. These reflected rays have therefore the property of being cut at right angles by a set of surfaces (in this case spheres with their common centre at the image). If, however, the reflecting surface be not plane, but curved in any manner, do the reflected rays still possess the property of being all intersected at right angles by a series of surfaces? Will they still possess this property after two or more reflections? Huyghens saw that they must, since these surfaces are, on the undulatory theory, the successive waves which have left the source of light. But if this be true, it ought to be capable of proof from the mere data known to Euclid. Malus, celebrated in the modern history of light, and a powerful mathematician, attempted without success to prove the more general of these propositions, and was led by the extreme complexity of his formulæ into errors which induced him to doubt its truth. Another great mathematician, the late Baron Plana, was equally unsuccessful. Before this, however, Hamilton had taken up the question, and had gradually attained the very simple proof of this and other far more general propositions which he gave in his *Theory of Systems of Rays*. Hamilton's process, when applied to this problem, may be made to depend on two simple propositions, whose truth is evident from ordinary geometry. But, for simplicity, we confine ourselves to the case of one reflexion.

The laws of reflexion (that the angles of incidence and reflexion are equal, and that the plane of the incident and reflected rays contains the perpendicular to the reflecting surface) involve the first of these propositions, viz.: that in general a reflected ray takes the *shortest* path from a given point, S, to some point, I, of the reflecting surface, and thence to a second given point, P.

[This is an inadequate representation of the truth, for the path may be a maximum, or a maximum-minimum; but it would require considerable detail, or the introduction of analytical expressions, to give an exact statement; and we are attempting, not to explain the subject completely, but to give the general reader an idea of what Hamilton did.] Also, when from a given point the shortest straight line is to be drawn to a given surface, it is evident that it must meet the surface at right angles. This is the second proposition above referred to. Now if we measure off along each reflected ray a length,  $IP$ , which, together with the length of the corresponding incident ray,  $SI$ , from the luminous point, gives a constant sum,  $V$ , the extremities,  $P$ , of all such lines will form a certain surface, which may also be called  $V$ . Thus, the length of the *whole* course of each ray, from the luminous point to the surface  $V$ , is the same. Hence, if any surface be drawn so as to touch  $V$  externally at the point  $P$ , the length of the ray  $SIP$  is less than if for  $P$  we put any other point of the new surface, even if, for  $I$ , we substitute any other point of the reflecting surface. Hence, keeping  $I$  fixed,  $IP$  is the shortest line to the new surface, and is therefore, by the second proposition, perpendicular to it, and of course also perpendicular to the surface  $V$  which touches it at  $P$ . This is Huyghens' proposition. The quantity or expression  $V$  is thus seen to contain the complete solution of any such question: for, if its form can be assigned, we have only to draw perpendiculars to the corresponding surface at every point, and these lines represent the reflected rays. And it is obvious that the same method, with similar results, may be applied to any number of successive reflections.

The quantity  $V$ , in these simple questions, is the length of the path which has been described by the ray in its passage from the luminous source. If we multiply it by the velocity of light, it becomes, on the corpuscular theory, what is called the *Action* of the luminous corpuscle; and the first of the above propositions becomes a case of the principle of *Least Action* in Dynamics. If we divide  $V$  by the velocity of light, we get the *Time* of passage from the luminous point to the surface  $V$ , and this, in the undulatory theory, is a minimum. It appears, then, that the law of reflexion is derivable from either theory.

To form the quantity  $V$  for a ray refracted from one homogeneous singly refracting medium into another, we must, on the corpuscular theory, *multiply* the length of each part of the ray by the velocity with which

the corpuscle moves along it, and add the two parts; on the undulatory theory, we must *divide* the length of each part of the path by the corresponding velocity of the wave, and add. These velocities are determinable by direct experiment, and hence the surfaces corresponding to the two values of  $V$  can be constructed. These are, in general, perfectly distinct from each other; so that the refraction of light furnishes a decisive test, and has enabled experimenters to pronounce in favor of the undulatory theory. But, as regards Hamilton's method, it matters not which theory we adopt, if in taking the corpuscular theory we use the reciprocal of the velocity as a multiplier instead of the velocity itself.

The exact step, in the above simple example, at which Hamilton's process comes in is the use of the second of the auxiliary propositions. The first of these propositions is, as we have seen, a case of Maupertuis' *Least Action*, the second gives a faint indication of Hamilton's *Varying Action*. In the former we suppose the initial and final points fixed, and determine the requisite form of the intervening path. In the latter we suppose in general the extreme points also to be variable, and determine them by the conditions of the problem.

Supposing the reader to have now an idea of the manner in which the solution of an optical question may be arrived at if we know the function  $V$ , which Hamilton calls the *Characteristic Function*, it remains that we should show how  $V$  itself may, in any case, be found. But, unfortunately, this does not admit of any such simple explanation, even in a particular case, as that which we have given of the former part of the question. We can only say that Hamilton showed that it was in every case to be determined by means of two partial differential equations, of the first order and second degree: and that these could be at once formed from the data of each particular problem. To the solution, then, of these two equations, the whole difficulty of any optical question is reduced: and, in the paper and its three supplements, many extremely general properties, most of them perfectly novel, are developed at great length. Charles speaks of the method employed as "*dominant toute cette vaste théorie*." But it is quite impossible to give the non-mathematical reader any idea of the full merit of this remarkable series of memoirs, remarkable not merely for the great and original discoveries in which they abound, but also for "a mastery over the management of algebraical symbols which has perhaps never been surpassed."

It is strange, indeed, that the one particular result of this theory, which, perhaps more than anything else that Hamilton has done, has rendered his name known beyond the little world of true philosophers, should have been easily within the reach of Fresnel and others for many years before; and in no way *required* Hamilton's new conceptions or methods, although it was by them that he was led to its discovery. This singular result is still known by the name *Conical Refraction*, which he proposed for it when he first predicted its existence in the third Supplement to his *Systems of Rays*, read in 1832. To give the reader an idea of its nature, let us suppose light from a brilliant point to fall on a plate of glass, or other singly refracting body, the side next the light being covered by a plate of metal with a very small hole in it. A single ray will thus be admitted into the glass, will be refracted in the ordinary way, and will escape from the plate as a single ray parallel to the direction of incidence. Try the same experiment with a slice of Iceland-spar, or other doubly refracting crystal. In general, the single incident ray will be split into two, which will pursue separate paths in the crystal, but will emerge parallel to each other and to the incident ray. But if a plate of a *biaxal* crystal be used, Hamilton showed that there are two directions in which if the incident ray fall it will be divided in the crystal, not into two, but into an infinite number of rays, forming a hollow cone. Each of these rays emerges parallel to the incident ray, so that they form on emergence a hollow cylinder of light.

But, further, suppose the same three substances to be experimented on as follows: place on *each* side of the plate a leaf of tinfoil, in which a very small hole is pierced, and expose the whole to light, proceeding, not from a point, but from a large surface. The particular ray which passes in glass, and other singly refracting bodies, from hole to hole through the plate, comes from *one* definite point of the luminous body and emerges from the second hole as a single ray. In uniaxal crystals, and generally in biaxal crystals, *two* definite and distinct rays from the luminary are so refracted as to pass from hole to hole; and therefore, at emergence, as each passes out parallel to its direction at incidence, we have two emergent rays. But Hamilton showed that there are *two* directions in every biaxal crystal, such that if the line between the holes be made to coincide with either, the light which passes from hole to hole will belong to an infinite number of different incident rays, forming a cone. On emergence, they will of course

again form a cone. Thus the prediction was, that in a plate formed of a biaxal crystal, a single ray, incident in a certain direction, would emerge as a hollow cylinder of light; and that light, forced to pass through such a plate in a certain direction, would enter and emerge as a hollow cone.

These two phenomena are deducible at once from the form of the *Wave Surface* (as it is called) in biaxal crystals, long before assigned by Fresnel; but no one seems to have anticipated Hamilton in closely studying the form of that surface from its equation, certainly not in recognizing the fact that it possesses four conical cusps, and, also, that it has four tangent planes, each of which touches it, not in one point, but in an infinite number of points forming a circle. The reader may get a rough idea of such properties by thinking of the portion of an apple which is nearest to the stalk.

But, besides these very remarkable results which Hamilton showed must be obtained by proper experimental methods, he predicted others of, perhaps, still more decisive character, with reference to the polarization of the light of the cone and cylinder above described. All these results of theory were experimentally verified, at Hamilton's request, in 1833, by Dr. Lloyd, the substance employed being a plate of arragonite.

The step from Optics to Dynamics, in the application of the method of Varying Action, was made in 1827, and communicated to the Royal Society, in whose *Philosophical Transactions* for 1834 and 1835 there are two papers on the subject. These display, like the "*Systems of Rays*," a mastery over symbols, and a flow of mathematical language (if the expression can be used) almost unequalled. But they contain, what is far more valuable still, the greatest addition which Dynamical Science has received since the grand strides made by Newton and Lagrange. Jacobi and other mathematicians have developed to a great extent, and as a question of pure *mathematics* only, Hamilton's processes, and have thus made extensive additions to our knowledge of Differential Equations. But there can be little doubt that we have as yet obtained only a mere glimpse of the vast *physical* results of which they contain the germ. And though this, of course, is by far the more valuable aspect in which any such contribution to science can be looked at, the other must not be despised. It is characteristic of most of Hamilton's, as of nearly all great discoveries, that even their indirect consequences are of high value.

After the remarks we have made on the Optical Paper, we may dismiss the Dynamical

cal ones very briefly; for the reader who has followed the illustration we gave of an elementary case of the former, will easily understand its bearing on the latter; and, if the Optical example be not understood, we cannot find a Dynamical one which can be presented with any more chance of being intelligible to him. We will merely quote some of Hamilton's own remarks, inserting (in square brackets), a few hints to help the reader:—

“In the solar system, when we consider only the mutual attractions of the sun and of the ten known planets, the determination of the motions of the latter about the former is reduced, by the usual methods, to the integration of a system of thirty ordinary differential equations of the second order, between the co-ordinates and the time; or, by a transformation of LAGRANGE, to the integration of a system of sixty ordinary differential equations of the first order, between the time and the elliptic elements; by which integrations, the thirty varying co-ordinates, or the sixty varying elements, are to be found as functions of the time. In the method of the present essay, this problem is reduced to the search and differentiation of a single function, which satisfies two partial differential equations of the first order and of the second degree: and every other dynamical problem, respecting the motions of any system, however numerous, of attracting or repelling points, (even if we suppose those points restricted by any conditions of connexion consistent with the law of living force,) is reduced, in like manner, to the study of one central function, of which the form marks out and characterises the properties of the moving system, and is to be determined by a pair of partial differential equations of the first order, combined with some simple considerations. The difficulty is therefore at least transferred from the integration of many equations of one class to the integration of two of another; and even if it should be thought that no practical facility is gained, yet an intellectual pleasure may result from the reduction of the most complex and, probably, of all researches respecting the forces and motions of body, to the study of one characteristic function, the unfolding of one central relation.

“Although LAGRANGE and others, in treating of the motion of a system, have shown that the variation of this definite integral [the *Action* of the system] vanishes when the extreme co-ordinates and the constant  $H$  [the initial energy] are given, they appear to have deduced from this result only the well-known law of *least action*; namely, that if the points or bodies of a system be imagined to move from a given set of initial to a given set of final positions, not as they do nor even as they could move consistently with the general dynamical laws or differential equations of motion, but so as not to violate any supposed geometrical connexions, nor that one dynamical relation between velocities and configurations which constitutes the law of living force; and if, besides, this geometri-

trically imaginable, but dynamically impossible motion, be made to differ infinitely *little* from the actual manner of motion of the system, between the given extreme positions; then the varied value of the definite integral called *action*, or the accumulated living force of the system in the motion thus imagined, will differ infinitely *less* from the actual value of that integral. But when this well-known law of least, or as it might be called, of *stationary action*, is applied to the determination of the actual motion of a system, it serves only to form, by the rules of the calculus of variations, the differential equations of motion of the second order, which can always be otherwise found. It seems, therefore, to be with reason that LAGRANGE, LAPLACE, and POISSON have spoken lightly of the utility of this principle in the present state of dynamics. A different estimate, perhaps, will be formed of that other principle which has been introduced in the present paper, under the name of the *law of varying action*, in which we pass from an actual motion to another motion dynamically possible, by varying the extreme positions of the system, and (in general) the quantity  $H$ , and which serves to express, by means of a single function, not the mere differential equations of motion, but their intermediate and their final integrals.”

These extracts give a very good idea, not only of the method itself, but of Hamilton's own opinion of it, though certain phrases employed may reasonably be objected to.

To give the popular reader an idea of the nature of the *Quaternions*, and the steps by which Hamilton was, during some fifteen years, gradually conducted to their invention, it is necessary to refer to the history of a singular question in algebra and analytical geometry, the representation or interpretation of *negative* and *imaginary* (or *impossible*) quantities.

Descartes' analytical geometry and allied methods easily gave the representation of a *negative* quantity. For it was seen at once to be a useful convention, and consistent with all the fundamental laws of the subject, to interpret a negative quantity as a quantity measured in the *opposite direction* to that in which positives of the same kind are measured. Thus a negative amount of elevation is equivalent to depth, negative gain is loss, a negative push is a pull, and so on. And no error, but rather great gain in completeness and generality, results from the employment of this convention in algebra, trigonometry, geometry, and dynamics.

But it is not precisely from this point of view that we can readily see our way to the interpretation of *impossible* quantities. Such quantities arise thus: If a positive quantity be squared, the result is positive; and the same is true of a negative quantity. Hence,

when we come to perform the inverse operation, *i. e.*, extract the square root, we do not at once see what is to be done when the quantity to be operated on is *negative*. When it is positive, its square root may be either a negative or a positive number, as we have just seen. If positive, it is to be measured off in some definite direction, if negative, in the opposite. But how shall we proceed to lay off the square root of a negative quantity? Wallis, in the end of the sixteenth century, suggested that this might be done *by going out of the line* on which the result, when real, would have been laid down; and his method is equivalent to this:—Positive unity being represented by an eastward line, negative unity will of course be represented by an equal westward line, and these are the two square roots of positive unity. According to Wallis' suggestion a *northward* and a *southward* line may now be taken to represent the two square roots of *negative* unity, or the so-called impossibles or imaginaries of algebra. But the defect of this is that we might have assumed with equal reason any other line (perpendicular to the eastward one) as that on which the imaginary quantities are to be represented. In fact Wallis' process is essentially limited to *plane* problems, and has no application to tridimensional space. But, imperfect as this step is, it led at once to another of great importance, the consideration of the length, and direction, of a line independently of one another. And we now see that as the factor negative unity simply *reverses* a line, while the square root of negative unity (employed as a factor) *turns it through a right angle*, the one operation may be looked upon as in a certain sense a duplication of the other. In other words, twice turning through a right angle, about the same axis, is equivalent to a reversal; or, negative unity, being taken to imply reversal of direction, may be considered as rotation through two right angles, and *its square root* (the ordinary imaginary or impossible quantity) *may thus be represented as the agent which effects a certain quadrantal rotation*. But, as before remarked, the axis of this rotation is indeterminate; it may have any direction whatever perpendicular to the positive unit line. If we fix on a particular direction, everything becomes definite, and we can on the same plan interpret the (imaginary) cube roots of negative unity as factors or operators which turn a line through an angle of sixty degrees positively or negatively. Similarly, any power of negative unity, positive or negative, whole or fractional, obtains an immediate representation. And the general statement of

this proposition leads at once (but not by the route pursued by its discoverer) to what is called De Moivre's Theorem, one of the most valuable propositions in plane trigonometry. Warren, Argand, Grassmann, and various others, especially in the present century, vainly attempted to extend this process to space of three dimensions. The discovery was reserved for Hamilton, but was not attained even by him till after fifteen or twenty years of arduous work. And it is a curious fact that it was by speculations totally unconnected with geometry that he was so prepared as to see, almost at the instant of seizing it, the full value of his invention. The frightful complexity of the results to which Warren was led in endeavouring to express as lines the products and quotients of directed lines in one plane, seems to have induced Hamilton to seek for a representation of imaginary quantities altogether independent of geometry. The results of some at least of his investigations are given in a very curious essay, *Algebra as the Science of pure Time*, communicated to the Royal Irish Academy in 1833, and published, along with later developments, in the seventeenth volume of their Transactions. We quote considerable portions of the introductory remarks prefaced to this Essay, as they show, in a very distinct manner, the logical character and the comprehensive grasp of Hamilton's mind.

"The Study of Algebra may be pursued in three very different schools, the Practical, the Philological, or the Theoretical, according as Algebra itself is accounted an Instrument, or a Language, or a Contemplation; according as ease of operation, or symmetry of expression, or clearness of thought, (the *agere*, the *fari*, or the *sapere*), is eminently prized and sought for. The Practical person seeks a Rule which he may apply, the Philological person seeks a Formula which he may write, the Theoretical person seeks a Theorem on which he may meditate. The felt imperfections of Algebra are of three answering kinds. The Practical Algebraist complains of imperfection when he finds his instrument limited in power; when a rule, which he could happily apply to many cases, can be hardly or not at all applied by him to some new case; when it fails to enable him to do or to discover something else, in some other Art, or in some other Science, to which Algebra with him was but subordinate, and for the sake of which and not for its own sake, he studied Algebra. The Philological Algebraist complains of imperfection, when his Language presents him with an Anomaly; when he finds an Exception disturb the simplicity of his Notation, or the symmetrical structure of his Syntax; when a Formula must be written with precaution, and a Symbolism is not universal. The Theoretical Algebraist complains of imperfection, when the clearness of his Contemplation



is obscured; when the Reasonings of his Science seem anywhere to oppose each other, or become in any part too complex or too little valid for his belief to rest firmly upon them; or when, though trial may have taught him that a rule is useful, or that a formula gives true results, he cannot prove that rule, nor understand that formula: when he cannot rise to intuition from induction, or cannot look beyond the signs to the things signified.

"It is not here asserted that every or any Algebraist belongs *exclusively* to any one of these three schools, so as to be *only* Practical, or *only* Philological, or *only* Theoretical. Language and Thought react, and Theory and Practice help each other. No man can be so merely practical as to use frequently the rules of Algebra, and never to admire the beauty of the language which expresses those rules, nor care to know the reasoning which deduces them. No man can be so merely philological an Algebraist but that things or thoughts will at some times intrude upon signs; and occupied as he may habitually be with the logical building up of his expressions, he will feel sometimes a desire to know what they mean, or to apply them. And no man can be so merely Theoretical, or so exclusively devoted to thoughts, and to the contemplation of theorems in Algebra, as not to feel an interest in its notation and language, its symmetrical system of signs, and the logical forms of their combinations; or not prize those practical aids, and especially those methods of research, which the discoveries and contemplations of Algebra have given to other sciences. But, distinguishing without dividing, it is perhaps correct to say that every Algebraical Student and every Algebraical Composition may be referred upon the whole to one or other of these three schools, according as one or other of these three views habitually actuates the man, and eminently marks the work.

"These remarks have been premised, that the reader may more easily and distinctly perceive what the design of the following communication is, and what the Author hopes or at least desires to accomplish. That design is *Theoretical*, in the sense already explained, as distinguished from what is *Practical* on the one hand, and from what is *Philological* on the other. The thing aimed at, is to improve the *Science*, not the *Art*, nor the *Language* of Algebra. The imperfections sought to be removed, are confusions of thought, and obscurities or errors of reasoning; not difficulties of application of an instrument, nor failures of symmetry in expression. And that confusions of thought and errors of reasoning, still darken the beginnings of Algebra, is the earnest and just complaint of sober and thoughtful men, who in a spirit of love and honour have studied Algebraic Science, admiring, extending, and applying what has been already brought to light, and feeling all the beauty and consistence of many a remote deduction, from principles which yet remain obscure, and doubtful.

"For it has not fared with the principles of Algebra as with the principles of Geometry. No candid and intelligent person can doubt the truth of the chief properties of *Parallel Lines*,

as set forth by Euclid in his Elements, two thousand years ago; though he may well desire to see them treated in a clearer and better method. The doctrine involves no obscurity nor confusion of thought, and leaves in the mind no reasonable ground for doubt, although ingenuity may usefully be exercised in improving the plan of the argument. But it requires no peculiar scepticism to doubt, or even to disbelieve, the doctrine of *Negatives* and *Imaginaries*, when set forth (as it has commonly been) with principles like these: that a *greater magnitude may be subtracted from a less*, and that the remainder is *less than nothing*; that *two negative numbers*, or numbers denoting magnitudes, each less than nothing, may be *multiplied* the one by the other, and that the product will be a *positive* number, or a number denoting a magnitude greater than nothing; and that although the *square* of a number, or the product obtained by multiplying that number by itself, is therefore *always positive*, whether the number be positive or negative, yet that numbers, called *imaginary*, can be found or conceived or determined, and operated on by all the rules of positive and negative numbers, as if they were subject to those rules, *although they have negative squares*, and must therefore be supposed to be themselves neither positive nor negative, nor yet null numbers, so that the magnitudes which they are supposed to denote can neither be greater than nothing, nor less than nothing, nor even equal to nothing. It must be hard to found a *SCIENCE* on such grounds as these, though the forms of logic may build up from them a symmetrical system of expressions, and a practical art may be learned of rightly applying useful rules which seem to depend upon them.

"So useful are those rules, so symmetrical those expressions, and yet so unsatisfactory those principles from which they are supposed to be derived, that a growing tendency may be perceived to the rejection of that view which regarded Algebra as a *SCIENCE*, in some sense *analogous to Geometry*, and to the adoption of one or other of those two different views, which regard Algebra as an *Art*, or as a *Language*: as a System of Rules, or else as a System of Expressions, but not as a System of *Truths*, or Results having any other validity than what they may derive from their practical usefulness, or their logical or philological coherence. Opinions thus are tending to substitute for the Theoretical question,—'Is a Theorem of Algebra *true*?' the Practical question,—'Can it be *applied* as an *Instrument*, to do or to discover something else, in some research which is not Algebraical?' or else the Philological question,—'Does its *expression harmonize*, according to the Laws of Language, with other Algebraical expressions?'

"Yet a natural regret might be felt, if such were the destiny of Algebra; if a study, which is continually engaging mathematicians more and more, and has almost superseded the Study of Geometrical Science, were found at last to be not, in any strict and proper sense, the Study of a Science at all: and if, in thus exchanging the ancient for the modern Mathesis, there were a gain only of Skill or Elegance, at the

expense of Contemplation and Intuition. Indulgence, therefore, may be hoped for, by any one who would inquire, whether existing Algebra, in the state to which it has been already unfolded by the masters of its rules and of its language, offers indeed no rudiment which may encourage a hope of developing a SCIENCE of Algebra: a Science properly so called; strict, pure, and independent; deduced by valid reasonings from its own intuitive principles; and thus not less an object of *priori* contemplation than Geometry, nor less distinct, in its own essence, from the Rules which it may teach or use, and from the Signs by which it may express its meaning.

"The Author of this paper has been led to the belief, that the Intuition of Time is such a rudiment. This belief involves the three following as components: First, that the notion of Time is connected with existing Algebra; Second, that this notion or intuition of Time may be unfolded into an independent Pure Science; and Third, that the science of Pure Time, thus unfolded, is co-extensive and identical with Algebra, so far as Algebra itself is a Science. The first component judgment is the result of an induction; the second of a deduction; the third is a joint result of the deductive and inductive processes."

It would not be easy, in our limited space, and without using algebraic symbols freely, to give the reader more than a very vague idea of the nature of this Essay. What we are most concerned with at present is the bearing of its processes upon the interpretation of imaginary quantities, and even on that we can only say a few words. The step in time from one definite moment to another depends, as is easily seen, solely on the *relative* position in time of the two moments, not on the *absolute* date of either. And, in comparing one such step with another, there can be difference only in *duration* and *direction*,—i.e., one step may be longer or shorter than the other, and the two may be in the same or in opposite directions, progressive or retrograde. Here numerical factors, positive and negative, come in. But to introduce something analogous to the imaginary of algebra, Hamilton had to compare with each other, not two, but two pairs or *Couples* of steps. Thus,  $a$  and  $b$  representing steps in time,  $(a, b)$  is called a Couple; and its value depends on the *order* as well as the magnitude of its constituent steps. It is shown that  $(-a, -b)$  is the same couple taken negatively. And the imaginary of common algebra is now represented by that operation on a step-couple which changes the sign (or order of progression) of the second step of the couple, and makes the steps change places. That is, it is the factor or operator which changes  $(a, b)$  into  $(-b, a)$ : for a second application will obviously produce the result  $(-a, -b)$ . There is, no doubt, here a perfectly

real interpretation for the so-called imaginary quantity, but it cannot be called simple, nor is it at all adapted for elementary instruction. The reader will observe that Hamilton, with his characteristic sagacity, has chosen a form of interpretation which admits of no indeterminateness. Unlike Wallis and others, who strove to express ordinary algebraic imaginaries by directions in space, Hamilton gave his illustration by time or progression, which admits, so to speak, of but one dimension. We may attempt to give a rough explanation of his process, for the reader who is not familiar with algebraic signs, in some such way as this:—If an officer and a private be set upon by thieves, and both be plundered of all they have, this operation may be represented by negative unity. And the imaginary quantity of algebra, or the square root of negative unity, will then be represented by a process which would rob the private only, but at the same time exchange the ranks of the two soldiers. It is obvious that on a repetition of this process both would be robbed, while they would each be left with the same rank as at first. But what is most essential for remark here is that the operation corresponding to the so-called imaginary of algebra is throughout regarded as *perfectly real*.

In 1835 Hamilton seems to have extended the above theory from *Couples* to *Triplets*, and even to a general theory of *Sets*, each containing an assigned number of time-steps. Many of his results are extremely remarkable, as may be gathered from the only published account of them, a brief notice in the Preface to his *Lectures on Quaternions*. After having alluded to them, he proceeds: "There was, however, a motive which induced me then to attach a special importance to the consideration of *triplets*. . . . This was the desire to connect, in some new and useful (or at least interesting) way, *calculation* with *geometry*, through some undiscovered *extension*, to *space* of *three dimensions*, of a method of *construction* or representation which had been employed with success by Mr. Warren (and indeed also by other authors, of whose writings I had not then heard), for *operations on right lines in one plane*: which method had given a species of *geometrical interpretation* to the usual and well-known *imaginary symbol* of algebra." After many attempts, most of which launched him, like his predecessors and contemporaries, into a maze of expressions of fearful complexity, he suddenly lit upon a system of extreme simplicity and elegance. The following remarkably interesting extract from a letter gives his own account of the discovery:—



" 2 Oct. 15, '58.

" P. S.—To-morrow will be the fifteenth birthday of the Quaternions. They started into life, or light, full grown, on the 16th of October 1842, as I was walking with Lady Hamilton to Dublin, and came up to Brougham Bridge, which my boys have since called the Quaternion Bridge. That is to say, I then and there felt the galvanic circuit of thought *close*; and the sparks which fell from it were the *fundamental equations between  $i, j, k$ ; exactly such as I have used them ever since*. I pulled out, on the spot, a pocket-book which still exists, and made an entry, on which, *at the very moment*, I felt that it might be worth my while to expend the labour of at least ten (or it might be fifteen) years to come. But then, it is fair to say that this was because I felt a *problem* to have been at that moment *solved*,—an intellectual *want relieved*,—which had *haunted* me for at least *fifteen years before*.

" *Less than an hour* elapsed, before I had asked and obtained leave, of the Council of the Royal Irish Academy, of which Society I was, at that time, the President,—to read at the *next general Meeting*, a *Paper on Quaternions*; which I accordingly *did*, on November 13, 1843.

" Some of those early communications of mine to the Academy may *still* have some interest for a person like you, who has since so well studied my Volume, which was not published for ten years afterwards.

" In the meantime, will you not do honour to the *birthday*, to-morrow, in an extra cup of —ink? for it may be obsolete now to propose XXX,—or even XYZ."

We must now endeavour to explain, in as popular a manner as possible, the nature of the new Calculus. In order to do so, let us recur to the suggestion of Wallis, before described, and endeavour to ascertain the exact nature of its defects. We easily see that one great defect is *want of symmetry*. As before stated, if we take an eastward line, of proper length, to represent positive unity, an equal westward line represents negative unity; but all lines perpendicular or inclined to these are represented by so-called imaginary quantities. Hamilton's great step was the attainment of the desired symmetry by making *all lines alike* expressible by so-called imaginary quantities. Thus, instead of 1 for the eastward line, and the square root of negative unity for a northward line, he represents *every line in space* whose length is unity by a *distinct* square root of negative unity. All are thus equally imaginary, or rather equally real. The  $i, j, k$  mentioned in the extract just given, are three such quantities; which (merely for illustration, because any other set of three mutually rectangular directions will do as well) we may take as representing *unit lines* drawn respectively *eastwards, northwards, and upwards*. The square of each being

negative unity, we may interpret the effect of such a line (when used as a factor or operator) as a left (or right) handed rotation through *one* right angle about its direction. The effect of a repetition of the operation is a rotation through two right angles, or a simple inversion. Thus, if we operate with  $i$  on  $j$  we turn the northward line left-handedly through a right angle about an eastward axis, *i.e.*, we raise it to a direction vertically upward. Thus we see that  $ij=k$ . But, if we perform the operation again, we see that  $ik$  or  $ij^2$  is now the southward line or  $-j$ . Thus  $i^2=-1$ . And similarly with the squares of  $j$  and  $k$ . It is to be noticed that in all these cases the operating line is supposed to be perpendicular to the operand. Also that we have taken for granted (what is easily proved), that  $i, j, k$  may stand indifferently for the unit line themselves or for the operation of turning through a right angle. Thus, the equation  $ij=k$  may either mean (as above) that  $i$  acting on the line  $j$  turns it into the line  $k$ ; or that the rectangular rotation  $j$ , succeeded by  $i$ , is equivalent to the single rotation  $k$ . We may easily verify the last assertion by taking  $i$  as the operand.  $j$  changes it to  $-k$ , and  $i$  changes this to  $j$ . But  $k$  turns  $i$  into  $j$  at once.

Even these simple ideas lead us at once to one of the most remarkable properties of quaternions. When turning the northward line ( $j$ ) about the eastward line ( $i$ ), we wrote the operator *first*,—thus  $ij=k$ . Now, the order of multiplication is *not* indifferent, for  $ji$  is *not* equal to  $k$ .  $ji$ , in fact, expresses that  $i$  (the eastward line) has been made to rotate left-handedly through a right angle about  $j$  (the northward line). This obviously brings it to the *downward* direction, or we have  $ji=-k$ . Similar expressions hold for the other products two and two of the three symbols. Thus we have the laws of their multiplication complete. And on this basis the whole theory may be erected. Now *any line whatever* may be resolved (as velocities and forces are) into so much eastward (or westward), so much northward (or southward), and so much upward (or downward). Hence every line may be expressed as the sum of three parts, numerical multiples of  $i, j$ , and  $k$  respectively. Call these numbers  $x, y$ , and  $z$ , then the line may be expressed by  $xi+yj+zk$ . If we square this we find  $-(x^2+y^2+z^2)$ ; for the other terms occur in pairs like  $xi \times yj$  and  $yj \times xi$ , and destroy each other; since we have, as above,  $ij+ji=0$ , with similar results for the other pairs of the three rectangular unit-lines. Now  $x^2+y^2+z^2$  is the square of the length of the line (by a double application of Euclid I. xlvii.) Hence the square of *every*

line of unit length is negative unity. And herein consists the grand symmetry and consequent simplicity of the method; for we may now write a single symbol such as  $a$  (Greek letters are usually employed by Hamilton in this sense), instead of the much more cumbrous and *not more expressive* form  $xi+yj+zk$ .

We have seen that the *product*, and consequently the *quotient*, of two lines at right angles to each other, is a third line perpendicular to both; and that the product or quotient of two parallel lines is a number: what is the product, or the quotient, of two lines *not* at right angles, and not parallel, to each other? It is a QUATERNION. This is very easily seen thus. Take the case of the quotient of one line by another, and suppose them drawn from the same point: the first line may, by letting fall a perpendicular from its extremity upon the second, be resolved into two parts, one parallel, the other perpendicular, to the second line. The quotient of the two parallel lines is a mere number, that of the two perpendicular lines is a line, and can therefore be expressed as the sum of multiples of  $i, j$ , and  $k$ . Hence,  $w$  representing the numeral quotient of the parallel portions, the quotient of any two lines may be written as  $w+xi+yj+xk$ ; and, in this form, is seen to depend essentially upon FOUR perfectly distinct numbers; whence its name. In actually working with quaternions, however, this cumbrous form is not necessary; we may express it as  $\beta \div a$ ,  $\beta$  and  $a$  being the two lines of which it is the quotient; and in various other equivalent algebraic forms; or we may at once substitute for it a single letter (Hamilton uses the early letters,  $a, b, c$ , etc.) The amount of condensation, and consequent shortening, of the work of any particular problem which is thus attained, though of immense importance, is not by any means the only or even the greatest advantage possessed by quaternions over other methods of treating analytical geometry. They render us entirely independent of special lines, axes of co-ordinates, etc., devised for the application of other methods, and take their reference lines in every case from the particular problem to which they are applied. They have thus what Hamilton calls an "*internal*" character of their own; and give us, without trouble, an insight into each special question, which other methods only yield to a combination of great acuteness with patient labour. In fact, before their invention, no process was known for treating problems in tridimensional space in a thoroughly natural and inartificial manner.

But let him speak for himself. The fol-

lowing passage is extracted from a letter to a mathematical friend, who was at the time engaged in studying the new calculus:—

... "Whatever may be the *future success* . . . of Quaternions as an *Instrument of Investigation*, they furnish *already*, to those who have learned to read them, ( $\phi\alpha\nu\acute{\alpha}\nu\tau\alpha \sigma\upsilon\nu\epsilon\rho\iota\sigma\iota\nu$ ), a powerful ORGAN OF EXPRESSION, especially in *geometrical science*, and in all that widening field of *physical inquiry*, to which *relations of space* (not always easy to *express with clearness* by the Cartesian Method) are subsidiary, or rather are indispensable."

To follow up the illustration we began with, it may be well merely to mention here that a quaternion may in *all* cases be represented as a power of a line. When a line is raised to the first, third, or any odd integral power, it represents a right-angled quaternion, or one which contains no pure numerical part; when to the second, fourth, or other even integral power, it degenerates into a mere number; for all other powers it contains four distinct terms. Compare this with the illustration already given, leading to De Moivre's theorem; and we see what a grand step Hamilton supplied by assigning in every case a definite direction to the axis about which the rotation takes place.

There are many other ways in which we can exhibit the essential dependence of the product or quotient of two directed lines (or *Vectors* as Hamilton calls them), on four numbers (or *Scalars*), and the consequent fitness of the name Quaternion. It may interest the reader to see another of them. Let us now regard the quaternion as the factor or operator required to change one side of a triangle into another; and let us suppose the process to be performed by turning one of the sides round till it coincides in direction with the other, and then stretching or shortening it till they coincide in length also. For the first operation we must know the axis about which the rotation is to take place, and the angle or amount of rotation. Now the direction of the axis depends on *two* numbers (in Astronomy they may be Altitude and Azimuth, Right Ascension and Declination, or Latitude and Longitude); the amount of rotation is a *third* number; and the amount of stretching or shortening in the final operation is the *fourth*.

Among the many curious results of the invention of quaternions, must be noticed the revival of *fluxions*, or, at all events, a mode of treating differentials closely allied to that originally introduced by Newton. The really useful, but over-praised differential coefficients, have, as a rule, no meaning

in quaternions; so that, except when dealing with scalar variables (which are simply degraded quaternions), we *must* employ in differentiation fluxions or differentials. And the reader may easily understand the cause of this. It lies in the fact that quaternion multiplication is *not commutative*; so that, in differentiating a product, for instance, each factor must be differentiated where it stands; and thus the differential of such a product is not generally a mere algebraic multiple of the differential of the independent quaternion-variable. It is thus that the whirligig of time brings its revenges. The shameless theft which Leibnitz committed, and which he sought to disguise by altering the appearance of the stolen goods, must soon be obvious, even to his warmest partisans. They can no longer pretend to regard Leibnitz as even a second inventor when they find that his only possible claim, that of devising an improvement in notation, merely unfits Newton's method of fluxions for application to the simple and symmetrical, yet massive, space-geometry of Hamilton.

One very remarkable speculation of Hamilton's is that in which he deduces, by a species of metaphysical or *à priori* reasoning, the results previously mentioned, viz., that the product (or quotient) of two parallel vectors must be a number, and that of two mutually perpendicular vectors a third perpendicular to both. We cannot give his reasoning at full length, but will try to make part of it easily intelligible.

Suppose that there is no direction in space pre-eminent, and that the product of two vectors is something which has quantity, so as to vary in amount if the factors are changed, and to have its sign changed if that of one of them is reversed; if the vectors be parallel, their product cannot be, in whole or in part, a vector *inclined* to them, for there is nothing to determine the direction in which it must lie. It cannot be a vector *parallel* to them; for by changing the sign of both factors the product is unchanged, whereas, as the whole system has been reversed, the product vector ought to have been reversed. Hence it must be a number. Again, the product of two perpendicular vectors cannot be wholly or partly a number, because on inverting one of them the sign of that number ought to change; but inverting one of them is simply equivalent to a rotation through two right angles about the other, and from the symmetry of space ought to leave the number unchanged. Hence the product of two perpendicular vectors must be a vector, and an easy extension of the same reasoning shows that it

must be perpendicular to each of the factors. It is easy to carry this further, but enough has been said to show the character of the reasoning.

It is characteristic of Hamilton that he fancied he saw in the quaternion, with its scalar and vector elements, the one merely numerical, the other having reference to position in space, a realization of the Pythagorean *Tetractys*

παγὰν ἀνάγινωσκον φύσεως ῥιζώματ' ἔχουσαν,

as it is called in the *Carmen Aureum*.

Of course, so far as mere derivation goes, it is hard to see any difference between the Tetractys and the Quaternion. But we are almost entirely ignorant of the meaning Pythagoras attached to his mystic idea, and it certainly must have been excessively vague, if not quite so senseless as the *Abra-cadabra* of later times. Yet there is no doubt that Hamilton was convinced that Quaternions, in virtue of some process analogous to the quasi-metaphysical speculation we have just sketched, are calculated to lead to important discoveries in physical science; and, in fact, he writes—

"Little as I have pursued such [physical] Studies, even in books, you may judge from my Presidential Addresses, pronounced on the occasions of delivering Medals (long ago), from the chair of the R.I.A., to Apjohn and to Kane, that *physical* (as distinguished from mathematical) investigations have not been *wholly* alien to my somewhat wide, but doubtless very superficial, course of *reading*. You might, without offence to me, consider that I abused the license of *hope*, which may be indulged to an inventor, if I were to confess that I expect the Quaternions to supply hereafter, not merely *mathematical methods*, but also *physical suggestions*. And, in particular, you are quite welcome to smile, if I say that it does not seem extravagant to me to suppose that a *full* possession of those *à priori* principles of mine, about the *multiplication of vectors*—including the Law of the Four Scales, and the Conception of the Extra-spatial Unit,—which have as yet not been much more than *hinted* to the public—might have led (I do not at all mean that *in my hands* they ever *would* have done so,) to an *anticipation* of *something like* the grand discovery of OERSTED: who, by the way, was a very *à priori* (and *poetical*) sort of man himself, as I know from having conversed with him, and received from him some printed pamphlets, several years ago. It is impossible to estimate the *chances* given, or opened up, by any new *way of looking at things*; especially when that way admits of being intimately combined . . . with *calculation* of a most rigorous kind."

This idea is still further developed in the following sonnet, which gives besides a good

idea of his powers of poetical composition. It is understood to refer to Sir John Herschel, who had, at a meeting of the British Association, compared the Quaternion Calculus to a *Cornucopia*, from which, turn it as you will, something new and valuable must escape.

#### THE TETRACTYS.

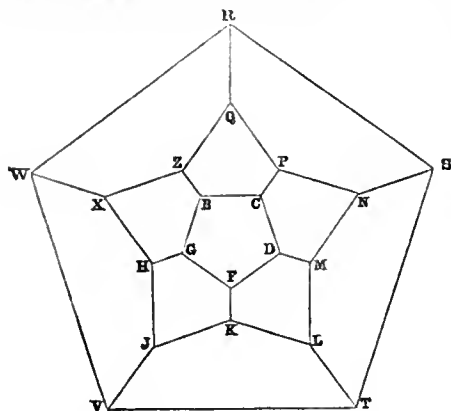
Or high Mathesis, with her charin severe,  
 Of line and number, was our theme; and we  
 Sought to behold her unborn progeny,  
 And thrones reserved in Truth's celestial sphere:  
 While views, before attained, became more  
 clear;  
 And how the One of Time, of Space the Three,  
 Might, in the Chain of Symbol, girdled be:  
 And when my eager and reverted ear  
 Caught some faint echoes of an ancient strain,  
 Some shadowy outlines of old thoughts sublime,  
 Gently he smiled to see, revived again,  
 In later age, and occidental clime,  
 A dimly traced Pythagorean lore,  
 A westward floating, mystic dream of FOUR.

Whatever may be the future of Quaternions, and it may possibly far surpass all that its inventor ever dared to hope, there can be but one opinion of the extraordinary genius, and the untiring energy of him who, unaided, composed in so short a time two such enormous treatises as the *Lectures* (1853), and the *Elements of Quaternions* (1866). As a repertory of mathematical facts, and a triumph of analytical and geometrical power, they can be compared only with such imperishable works as the *Principia* and the *Mécanique Analytique*. They cannot be said to be adapted to the wants of elementary teaching, but we are convinced that every one who has a real liking for mathematics, and who can get over the preliminary difficulties, will persevere till he finishes the work, whichever of the two it may be, he has commenced. They have all that exquisite charm of combined beauty, power, and originality which made Hamilton compare Lagrange's great work to a "scientific poem." And they conduct the mathematician to a boundless expanse of new territory of the richest promise, the cultivation of which cannot be said to have been more than commenced, even by labour so unremitting, and genius so grand, as Hamilton brought to bear on it.

The unit vectors of the quaternion calculus are not the only roots of unity which Hamilton introduced into practical analysis. In various articles in the *Philosophical Magazine* he developed the properties of groups of symbols analogous to the  $i, j, k$  of

quaternions, but more numerous, and gave various applications of them. These groups have, generally, a direct connexion with the "*Sets*" with which he was occupied just before the invention of the quaternions: and it would be vain to attempt to explain their nature to the general reader. But we must say a few words about another, and most extraordinary, system which Hamilton seems to have invented about 1856, and which has no connexion whatever with any previous group. Unfortunately, Hamilton has published but a page or two with reference to them, yet that little is enough to show the probability of their becoming, at some future time, of great importance in the study of crystals and polyhedra in general. The subject is capable of indefinite extension; but Hamilton seems to have carefully studied only one particular system, which depends mainly upon two distinct and non-commutative fifth roots of *positive* unity, which, for ease of reference, we will call, with their inventor,  $\lambda$  and  $\mu$ . Although nothing more practical than an ingenious "puzzle" has yet resulted from these investigations, their singular originality and (if we may use the word) oddity, and the wonderful series of new transformations which they suggest to the mathematician, render them well worthy of further study and development. Some idea of a small class of their properties may be derived from the consideration of a pentagonal dodecahedron (a solid enclosed by *twelve* faces, each of which has *five* sides). The number of edges of this solid is thirty; as we may see by remarking that, if we count five edges for each of the twelve faces, each edge will have been taken twice. Also, since three edges meet in each corner, and since each edge passes through two corners, we shall get three times too many corners by counting two for each edge. That is, there are twenty corners. Now, in that one of Hamilton's systems which he most fully worked out, the operators  $\lambda$  and  $\mu$ , applied to any edge of the pentagonal dodecahedron, change it into one of the adjoining edges. Thus, going along an edge, to a corner, we meet two new edges, that to the *right* is derived from the first by the operator  $\lambda$ , that to the *left* by  $\mu$ . Every possible way of moving along successive edges of such a solid may therefore be symbolized by performing on the first edge the successive operations  $\lambda$  and  $\mu$  in any chosen order. And, as the reader may easily convince himself by trial, such a group of twenty operations as this, consisting of the series  $\mu, \lambda, \mu, \lambda, \mu, \mu, \mu, \lambda, \lambda, \lambda$ , taken twice, brings us back to the edge we started from, after passing through each

corner once, and only once. Such results as these, however, are far more easily obtained by analysis. Upon this mathematical basis Hamilton founded what he called the *Icosian Game*, an elegant, and in some cases difficult puzzle. As the dodecahedron would be a clumsy article to handle, besides having the disadvantage of permitting the players to see only half of its edges at once, Hamilton substituted for it the annexed plane diagram, which is somewhat distorted



by projection (the eye being supposed to be placed very near to the middle of one face), in order to prevent any two of the lines which represent the edges from crossing each other. The game is played by inserting pegs, numbered 1, 2, 3, . . . 20, in successive holes, which are cut at the points of the figure representing the corners of the dodecahedron; taking care to pass only along the lines which represent the edges. It is characteristic of Hamilton that he has selected the 20 *consonants* of our alphabet to denote these holes.

When five pegs are placed in any five successive holes, it is always possible in *two* ways, sometimes in *four*, to insert the whole twenty, so as to form a continuous circuit. Thus, let *BCDEG* be the given five, we may complete the series by following the order of the consonants; or we may take the following order (after *G*) *HXWRSUVJKLNMNPQZ*. If *LTSRQ*, or *ZBCDM*, be given there are four solutions. If fewer than five be fixed at starting there are, of course, more solutions. This is only the simplest case of the game. Puzzles without number, and of a far higher order of difficulty, can be easily suggested after a little practice, but even more readily by the proper mathematical processes. Thus, *BCD* may be given, the problem being to insert all the pegs in order, and end at a given hole. If that hole be *X*, it is impossible; if *T*, there is one solution; if *J*, two; and, if *N*, four. Again, certain initial points

being given, *finish* with a given number of pegs. Thus, given *KJV*, finish with the eighth. The other five are *TSXML*, for when we have got to *L* no other peg can be inserted. If *LKJ* be given the others are *VWUSTR*. Similarly to finish with any additional number short of 18.

We have been thus explicit on this apparently trivial matter, because we do not know of any other game of skill which is so closely allied to mathematics, and because the analysis employed, though very simple, is more startlingly novel than even that of the quaternions. The *i, j, k* of quaternions can, as we have seen, be represented by three definite unit lines at right angles to each other. How can we represent geometrically the  $\lambda$  or the  $\mu$  of this new calculus, either of which produces precisely the same effect whatever edge of whatever face of the dodecahedron it be applied to?

Another very elegant invention of Hamilton's, and one which appears to have been suggested to him by his quaternion investigations, is the *Hodograph*, which supplies a graphic representation of the velocity and acceleration in every case of motion of a particle. The easiest illustration we can give of this is a special case, the hodograph of the earth's motion in its orbit. In consequence of the fact that light moves with a *finite*, though very great, velocity, its apparent direction when it reaches the eye varies with the motion of the spectator. The position of a star in the heavens appears to be nearer than it really is to the point towards which the earth is moving; in fact, the star seems to be displaced in a direction parallel to that in which the earth is moving, and through a space such as the earth would travel in the time occupied by light in coming from the star. This is the phenomenon detected by Bradley, and known as the *aberration of light*. Thus the line joining the true place of the star with its apparent place represents at every instant, by its length and direction, the velocity of the earth in its orbit. We are now prepared to give a general definition. The hodograph corresponding to any case whatever of motion of a point is formed by drawing at every instant, from a fixed point, lines representing the velocity of the moving point in magnitude and direction. One of the most singular properties of the hodograph, discovered by Hamilton, is that the hodograph of the orbit of every planet and comet, however eccentric its path may be, is a circle. A star, therefore, in consequence of aberration, appears to describe an *exact* circle surrounding its true place, in a plane parallel to the plane of the ecliptic; not merely, as seems

formerly to have been assumed, an *approximate* one. But, unless the earth's orbit were exactly circular the true place of the star will not be the *centre* of the hodograph. To enter into further details on this subject we should require geometrical diagrams or analytical symbols.

The discoveries we have already described, and the papers and treatises we have mentioned, might well have formed the whole work of a long and laborious life. But, not to speak of the enormous collection of MS. books, full to overflowing with new and original matter, left by Hamilton, which have been handed over to Trinity College, Dublin, and of whose contents we hope a large portion at least may soon be published, the works we have already called attention to barely form the greater portion of what he has published. His extraordinary investigations connected with the solution of algebraic equations of the Fifth Degree, and his examination of the results arrived at by Abel, Jerrard, and Badano, in their researches on this subject, form another grand contribution to science. There is also his great paper on *Fluctuating Functions*, a subject which, since the time of Fourier, has been of immense and ever increasing value in physical applications of mathematics. Of his extensive investigations into the solution (especially by numerical approximation) of certain classes of differential equations, which constantly occur in the treatment of physical questions, only a few items have been published, at intervals, in the *Philosophical Magazine*. Besides all this, Hamilton was a *voluminous* correspondent. Often a single letter of his occupied from fifty to a hundred or more closely written pages, all devoted to the minute consideration of every feature of some particular problem; for it was one of the peculiar characteristics of his mind, never to be satisfied with a general understanding of a question, he pursued it until he knew it in all its details. He was ever courteous and kind in answering any applications for assistance in the study of his works, even when his compliance must have cost him much valuable time. He was excessively precise and hard to please, with reference to the final polish of his own works for publication; and it was probably for this reason that he published so little, compared with the extent of his investigations. His peculiar use of capitals, italics, and other typographical artifices for the purpose of imitating in writing and type, as closely as possible, the effects of emphasis and pause in a *vivâ voce* lecture, will be evident from almost any of the extracts we have made from his works. To such an extent did he carry this, that some pages

of his *Lectures* are almost painful to the eye.

Hamilton had, at one time, serious intentions of entering the Church, and was, more than once, offered ordination. The following letter, written to the Editor of the *Irish Ecclesiastical Journal*, and published in that work, contains a very singular attempt to elucidate one of the grandest questions connected with the Christian religion.

"ON THE ASCENSION OF OUR BLESSED LORD.

"Whitsun Eve, 1842.

"SIR,—The meditations of a Christian, at this sacred season, turn naturally on that seeming pause in the operations of divine Providence, when, as at this time, the disciples who had seen their Lord parted from them, and taken up into heaven, were waiting at Jerusalem for the promised coming of the Comforter. You will judge whether the following remarks, in part confessedly conjectural, but offered (it is hoped) in no presumptuous spirit, may properly occupy any portion of your columns, in connexion with the events which the Church at this season commemorates.

"It may be assumed that your readers are disposed to adopt, in its simplicity, the teaching of the 4th article, that 'Christ did truly rise again from death, and took again his body, with flesh, bones, and all things appertaining to the perfection of Man's nature; wherewith he ascended into heaven, and there sitteth, until he return to judge all Men at the last day.' They will not be inclined to explain away the doctrine of the Ascension of the Lord's Humanity, into what some have sought to substitute for it,—a ceasing of the Godhead to be manifested in the person of Christ. Far rather will they be ready to believe that the 'glorious' Ascension was the epoch of a more bright manifestation of God in Christ, than any which had been vouchsafed before though perhaps rather to angelic than to human beings; and that no merely figurative, though in part a spiritual sense, is to be assigned to those passages of Holy Writ, which speak of Jesus as having been highly exalted, and seated at the right hand of God. As God, indeed, we know that Heaven, and the Heaven of Heavens, cannot contain him; yet it is also declared that Heaven is His Throne, and Earth is His Footstool: and Scripture and the Church seem to attest alike, that the risen and glorified Humanity of Christ is now in Heaven, as in some holiest place, where God is eminently manifested, and eminently worshipped; his power, his name, and his presence dwelling there.

"A local translation of Christ's Body being thus believed, it is natural to believe also that this *change of place* was accomplished *in time*, and not with that strict instantaneity which may be attributed to a purely spiritual operation. Accordingly we read that at least the *first part* of the act of Ascension,—the part of which the Apostles were witnesses,—was *gradual*; their gaze could follow for a while their ascending Lord: nor was it instantly, though it



may have been soon, that a cloud received him out of their sight. And to suppose that the remainder of that wonderful translation was effected without occupying *some* additional time, seems almost as much 'against the truth of Christ's natural Body,' as that it should be 'at one time in more places than one,' which latter notion a rubric of our Book of Common Prayer rejects as error and absurdity. The Cloud which hovered over Bethany was surely not that Heaven where Jesus sitteth at the right hand of God; and to believe that his arrival, as Man, at the latter, was *subsequent* to his arrival at the former, seems to be a just as well as an obvious inference, from the Doctrine of the Ascension of His Body.

"But *how long* was it *subsequent*? We dare not, by mere reasoning, attempt to decide this question. That place to which the Saviour has been exalted, and which, although in one sense 'Heaven,' is in another sense declared to be 'far above all heavens,' may well be thought to be inconceivably remote from the whole astronomical universe; no eye, no telescope, we may suppose, has pierced the mighty interspace: light may not yet have been able to spread from thence to us, if such an effluence as light be suffered thence to radiate. And, on the other hand, it must be owned, that, vast beyond all thought of ours as the interval in space may be, Christ's glorious Body may have been transported over it, in any interval of time, however short.

"Reason is silent then: nor can we expect to find, on this point, a *clear* revelation in Scripture; but do we meet with no *indications*? Does Holy Writ leave us here *entirely* without light? I think that it does not: and shall submit to you a view, which it seems to me to *suggest*.

"First, it is clear from Scripture, that the Ascension of Christ had been entirely performed *before* the Descent of the Spirit on the Day of Pentecost. Thus, in a well-known verse of that sixty-eighth Psalm, which the Church has connected with the Service for Whitsunday, and which St. Paul has quoted in reference to the Ascension; in the first sermon of Peter to the Jews; and in other passages of the Bible: the obtaining of 'gifts for men,' the receiving from the Father the promise of the Holy Ghost, is spoken of as a result or *consequence* of Christ's having ascended upon high.—having been exalted by the right hand of God,—having ascended, as did not David, into the Heavens. The act of ascending occupied therefore *no longer time* than that from Holy Thursday to Whitsunday.

"But may it not have been allowed to occupy *so long* a time as this? No reason *à priori* can be given against the supposition; no passage of Scripture, no decision of the Church, so far as I know, is against it. The very close connexion announced, in the texts above alluded to, between the Ascension of Christ into Heaven, and the Descent of the Holy Ghost upon Earth, appears to me an indication in its favour. For the *purely spiritual* nature of the later descent prevents the necessity, almost the possibility, of our supposing *it* to have occupied time at all. No sooner, it may reasonably be thought, did

Jesus take his seat at the right hand of God, than the Spirit fell upon the Apostles. The finished work, of ascending up on high, may have been followed *instantly* by the receiving of gifts for men.

"Should this conjecture be admitted, of the Ascension not having been *completed* till the Day of Pentecost, although *commenced* ten days before, it might suggest much interesting meditation respecting the 'glory,' the 'great triumph,' with which our Saviour Christ was then exalted into God's Kingdom of Heaven. May not the transit from the Cloud to the Throne have been but one continued passage, in long triumphal pomp, through powers and principalities made subject? May not the 'Only Begotten Son' have then again been brought forth into the world,—not by a new Nativity, but (as it were) by Proclamation and Investiture,—while the Universe beheld its God, and all the Angels worshipped him? And would not such triumphal progress harmonize well with that Psalm, which has always been referred in a special manner to the Ascension, and which speaks of the everlasting Gates as lifting up their heads, that the King of Glory might come in?

"Many other reflections occur to me, but I forbear. If anything unscriptural or uncatholic shall be detected by you in the foregoing remarks, or (in the event of your publishing them) by your readers, the pointing it out will be received as an obligation by, Sir, your obedient servant,

"W[illiam] R[owan] H[amilton]."

Like most men of great originality, Hamilton generally matured his ideas before putting pen to paper. "He used to carry on," says his elder son, "long trains of algebraical and arithmetical calculation in his mind, during which he was unconscious of the earthly necessity of eating: we used to bring in a 'snack' and leave it in his study, but a brief nod of recognition of the intrusion of the chop or cutlet was often the only result, and his thoughts went on soaring upwards. I have been much with him in his periods of mathematical incubation, and would divide them into three, thus:—*First*, that of *contemplation*, above indicated. *Second*, that of *construction*. In this he committed to paper (or, if nothing else were at hand, as when in the garden, a few formulæ written on his finger-nails) the skeleton, afterwards to be clothed with flesh and blood, of the results arrived at. *Third*, the *didactic* stage. Having now completely satisfied himself of the correctness of the results (and sometimes having retraced and simplified the method of discovery) he proceeded to consider how to *teach* it, and this by *experiment*. I was so long with him in his periods of mathematical incubation that I knew, almost by the tones of his voice and the expression of his eyes, when the didactic period had arrived, and generally anticipated it by fetching the black-



board to whatever room he might be in. The audience generally consisted of the Observatory assistant and myself. . . . He was not so much teaching, as throwing his mind into a didactic attitude. I amused him once by saying that his lecturing us on equations of the fifth degree reminded me of the lion preparing for action by whetting his claws on the bark of a tree. . . . He appeared to enjoy intensely arithmetical calculations. I never saw him look so perfectly happy as when running like a sleuth-hound on the track of some unhappy decimal which had marred the work, and unearthing it in its den. . . . I cannot otherwise express his attachment to his own ms. volumes than by saying that he *loved* them. He once, at a luncheon party of students at the Observatory, ranged some thirty of them on the chimney-piece, and, turning to the students, said, 'These books represent much of the happiness of my life.'

A good idea of the process of "incubation" above mentioned is given by the following extract from a letter to a mathematical friend. Hamilton is speaking of one of the most beautiful discoveries contained in his last work on quaternions, the general symbolical solution of a vector equation of the first degree; and he writes, in 1859, the day after the discovery was made:—

"While I was walking, on business of another sort, through Dublin yesterday, the question again occurred to me.

"*Puræ sunt plateæ, nihil ut meditantibus obstat*"—

"*I nunc, et versus tecum meditare canoros.*"

I was not so rash as to attempt the composition of a Sonnet in the streets; though, in acceptance of a challenge from a Lady, long ago, beside whom I was sitting in a Music Room, I *did* dash off a Sonnet before the performance had ceased. But those days are over:—happily? Yes, so far as the getting a little more sense, and less sensibility, is concerned.

"The *problem*, however, (though not the *Sonnet*,) haunted me, as it happened, yesterday, while I was walking from the Provost's House to that of the Academy; and though I wrote nothing down, that day, (for I had an immensity of other things to attend to,) I resumed it this morning; and arrived at what you might call, in the language of *your* last, a "*perplexingly easy*" solution (in the sense of being very UNLABORIOUS, for I do not pretend that the *reasoning* does not require close *attention*). . . . So simple does this solution appear, that I hesitate as yet to place entire confidence in it; and therefore, till I have fully written it out,—for at present it is partly *mental*,—and have given it a complete and thorough re-examination, I hesitate to communicate it to you."

We give here, as curiously applicable to Hamilton himself, another of his sonnets,—*"those fourteen-lined productions,"* as he says, "to which I attach but little value on the *artistic* side, although some of them are associated with happy or mournful moments, and which at all events may, to a man's self, serve as instruments of *culture*, and may have some social or other interest to those who know him chiefly as a writer, or thinker, on subjects of a very different kind."

TO ADAMS (Discoverer of Neptune.)

*Sonnet on Unselfishness in the Pursuit of Truth and Beauty.*

ὥστε, ὦ Ζεῦ, μάλιστ' αὖ μοι ἀπόδος, ἐγγυήσας μοι αὐτὴν  
... ἀδυνάτων ἐρᾶς.

When Vulcan cleft the labouring brain of Jove,  
With his keen axe, and set Minerva free,  
The unimprisoned Maid, exultingly,  
Bounded aloft, and to the Heaven above  
Turned her clear eyes, while the grim Work-  
man strove

To claim the Virgin Wisdom for his fee,  
His private wealth, his property to be,  
And hide in Lemnian cave her light of love,

If some new truth, O Friend! thy toil discover,

If thine eyes first by some fair form be blest,

Love it for what it is, and as a lover  
Gaze, or with joy receive thine  
honoured guest:

The new found Thought, set free, awhile may hover

Gratefully, near thee, but it cannot rest.

The following final extract, from a letter written in 1858, gives a very clear insight into the view Hamilton took of his own discoveries, and of the comparative value which he attached to methods and results. There is no doubt that, in the case of quaternions at least, he sought mainly to improve his methods, and almost studiously avoided the treatment of new subjects; and the result is, that in his hands alone the development attained is extraordinary:—

"I reminded the R. I. A. that, so long ago as 1831, I had communicated to that body an Extension of (what is usually called) Herschel's Theorem: namely, the following extended Formula. . . . By making the two particular assumptions . . . my formula becomes . . . which is, if I remember rightly, one form of Herschel's Theorem. . . . In speaking of 'Herschel's Theorem,' I believe that I follow an *usage*, which of course he did not originate, but against which he has never complained. In my own case, however, I *did* complain, although (as I hope) gently, that a *much less general formula* of mine, which had indeed occurred in the same short paper of 1831 . . .

had been cited, in a then recent number of the *Cambridge and Dublin Mathematical Journal*, under the title of "Hamilton's Theorem." What I meant was merely this;—that although I had no desire to have any theorem of mine so named, yet it was scarcely just, in my opinion, to select, out of a single and short paper, a formula which involved only one functional characteristic, one symbol of operation, and one ultimately evanescent variable; and by the manner in which the formula so selected was mentioned, or by the title under which it was cited, to ignore, or even virtually to reject, the much more general equation, which (as you see) involved two functional signs, two operators, and two ultimately evanescent variables. So, don't cite anything as "Hamilton's Theorem," if you wish not to tread upon my corns! I hope, indeed, that it may not be considered as unpardonable vanity or presumption on my part, if, as my own taste has always led me to feel a greater interest in *methods* than in *results*, so it is by METHODS, rather than by any THEOREMS, which can be separately quoted, that I desire and hope to be remembered. Nevertheless it is only human nature, to derive some pleasure from being cited, now and then, even about a "Theorem," especially when . . . the quoter can enrich the subject, by combining it with researches of his own."

In concluding, we have only to express a hope that we have rendered intelligible to the general reader, though perhaps in but small degree, at all events the nature of some of the grand investigations of this illustrious man. Of course there will ever be many who, though (or perhaps because) totally incapable of understanding anything lofty or difficult, will sneer out over such pages the *cui bono* of ignorance. They cannot see one of the sources of the vastness of modern commerce in Newton meditating about gravity, another in Watt patching a trumpery model. To their narrow vision the designer of a new easy-chair or the inventor of a new sauce, a lucky speculator or a sensation-novelist, even, it may be, a mountebank assuming the guise of a philosopher, is the grandest of the human race; but, while science lasts, the name of Hamilton will hold an honoured position among those of her few greatest sons.

We have endeavoured to give, in brief compass, a trustworthy account of Hamilton and his works. Of himself the account is easy, being mainly quoted from his correspondence. In our account of his works we have endeavoured, so far as we could, to avail ourselves of extracts from his writings. In several cases this was impossible; and we must warn the reader not to judge of the importance of the subject by the extremely small fragments which we have been forced to give as popularly intelligible specimens. Many of the preceding extracts are taken

from letters which we have received from Hamilton himself. We have derived some assistance from articles, or sketches, in the *Dublin University Magazine* (Jan. 1842), the *Gentleman's Magazine* (Jan. 1866,) and the *Monthly Notices of the Royal Astronomical Society* (Feb. 1866). The last of these, especially, is an admirable tribute to Hamilton's memory, but is somewhat marred by inaccuracies in the note on the nature of quaternions. And we must express our obligations to W. E. Hamilton, Esq., C. E., the elder son of Sir William, for many facts and documents; and for his kindness in verifying the statements we have made as to his father's ancestry and early history.

We are glad to hear that the author of the first of these sketches, the Rev. R. P. Graves, one of Hamilton's oldest friends, and brother of his former colleague in the University the Bishop of Limerick, is about to write his biography. The prospect of such a volume leaves us but one wish to express, that the authorities of Trinity College may publish, as speedily as possible, if not all, at least all that is most valuable in, the mss. of the most distinguished among the many great men who, as students and professors, have shed lustre on the University of Dublin.

We conclude with an extract from the Opening Address (Session 1865-6) of the President of the Royal Society of Edinburgh, of which Hamilton was an Honorary Fellow.

"Sir John Herschel once wrote thus:—'Here whole branches of continental discovery are unstudied, and, indeed, almost unknown even by name. It is vain to conceal the melancholy truth. We are fast dropping behind. In mathematics we have long since drawn the rein and given over a hopeless race, etc.' Hamilton, while second to none, was one of the earliest of that brilliant array of mathematicians, who, since Herschel wrote, have removed this stigma, and well-nigh reversed the terms of his statement. Another was the late Professor Boole. . . . Their death has made a gap in the ranks of British science which will not soon be filled; and our sorrow is but increased by the recollection that they have been removed in the full vigour of their intellect, and when their passion for work was, if possible, stronger than ever."

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- ART. III.—1. *The Book of Ballads*. Edited by BON GAULTIER. Seventh Edition. Edinburgh, 1861.  
 2. *Firmilian*. Edinburgh, 1854.  
 3. *Tales from Blackwood*. Edinburgh.

4. *Headlong Hall*, etc. Bentley's Standard Novels, 1837.
5. *Gryll Grange*. By the Author of *Headlong Hall*. London, 1861.
6. *Reliques of Father Prout*. A New Edition, 1866.

SINCE the days of the prince of biographers, the wise and warm-hearted Plutarch of Chæroneæ, very little has been done in literature for that *parallelism* which was so essential a part of his biographical theory. To take men of eminence, and place them in juxtaposition; to observe their points of similarity, and of dissimilarity *in* similarity, so that each should be separately more intelligible from the comparison of him with the other;—this, the Plutarchian idea, has been less fruitful than might have been expected, considering the just popularity of Plutarch from the days of Montaigne downwards. Bishop Hurd deserves the praise of having advocated its study, and of having suggested some material for the purpose; and Coleridge, in what he called the “landing-places” of his *Friend*, so far followed it up, that he made most ingenious suggestive comparisons between Luther and Rousseau, and between Erasmus and Voltaire. We are not going to deal just now with men of such magnitude; but we must be allowed to congratulate ourselves on having a good opportunity of applying the doctrine in the case of a group of distinguished contemporaries recently taken away. Within about a twelve-month three humorists have been blotted from the roll of living British men of letters: Professor Aytoun, Mr. Thomas Love Peacock, and the Reverend Frank Mahony—better known as Father Prout. Each of these men represented one of the three kingdoms: Aytoun, our own bonnie Northern land; Peacock, England; and Mahony, Ireland. They were all humorists. They were all lyrists. They were all more or less Bohemian and eccentric in the exercise of their gifts. They were all men of classical education. They were all men of strongly marked national type. Finally, they had this, too, in common, that they never became exactly popular, that is, universally popular in the sense in which Thackeray or Jerrold were so, but enjoyed their chief reputation among the cultivated classes. Every generation has writers of this peculiar type—writers often of higher powers and attainments than many who are better known,—but who, somehow, never pass the line which divides those who are distinguished from those who are famous. It is curious to reflect that De Quincey never had a tithe as many readers as Mr. Harrison Ainsworth, and that Mr. Tupper is some fifty

times as well known as Henry Taylor. But this is one of the eternal phenomena of literature which never discourages real men of letters, while it ought to teach critics that perhaps their most important duty is to help to make known those whom the world has not learned to know for itself. If we propose to glance now at what was done by the three gentlemen just mentioned, for their generation, our object is partly to induce readers to become better acquainted with them at first-hand. Professor Aytoun's works are, indeed, well known in Scotland, but might be better known in the South and in Ireland. Peacock, in spite of the admirable wit and cleverness of his tales, is, we suspect, little appreciated out of London. Father Prout is loved and honoured by own countrymen, and in the literary world of the metropolis his name is a household word; but, elsewhere, few know how much enjoyment may be got from his pages. We should like to see the reputation of these brilliant men *counter-changed*, as the heralds say—the Scotch and Irish reputations crossing into each other—and the English intermingling with both. We are no friends to excessive centralization. Indeed, we cherish national individualism as one of the conditions of literary variety, raciness, and colour. But nationality *without* intercommunion has a constant tendency to degenerate into provincialism; and provincialism preserves national traits not as living things, but as petrifications. The intellectual life of every country ought to blow over into other lands like a wind. The north wind is necessary to keep the south cool, and the south wind is necessary to keep the north from freezing. Now, it so happens, as has been already briefly hinted, that each of our three humorists had a strong flavour of his own country about him. In an age when so many Scotchmen emigrate, Aytoun devoted his life to Scotland. He formed himself on native models, and attached himself to a native school of literature. His humour—and it is humour with which we have to do in this paper—was essentially Scotch; that is to say, hearty or even vehement in expression sometimes, but dry to the taste; shrewd and thoughtful at bottom; and based on character rather than light and brilliant. He did not shine in epigram. His prose style wanted clearness, terseness, grace. His strong point both as writer and talker was humour proper, fun, a perception of the ludicrous; but a perception of the ludicrous from a Scot's point of view, in which the intellectual rather than the moral pleasure to be derived from it is the predominant object sought. Peacock, again, was eminently English in

his clear good sense, his quick penetrating sarcasm, embodied with classic neatness of expression, and his fine practical contempt for all extravagances of taste and speculation. When we come to Prout, we find *his* genius not less characteristic of his nation. His fun is full of all kinds of playfulness, and fancy, and paradox,—real *larky* fun, to use a familiar expression,—such as the English kind rarely is, and the Scotch almost never. In pure epigram, the Englishman has the best of it. The Irishman's epigram is most fanciful; his precious stones are coloured. The Scot does not excel in epigram at all; nor much in that drollery, the drollery of *abandon*, of which downright noisy laughter is the natural result. The Englishman's joke is like a smile—a smile in which his intellectual eyes take a part; the Irishman's is a poke in your ribs, accompanied with a laugh, shrill rather than hearty; the Scot's is a deep chuckle, an inward laugh, which does not disturb the lines of a mouth full of a sagacious knowingness, and a conscious sense of the pregnant meaning of which the best Scotch pleasantry is full. While thus distinctly gifted according to their distinct races, our three celebrated specially each his *φίλιν παρτίδα γαίαν*. The author of the "Lays of the Scottish Cavaliers" wrote with obvious delight of the "Thundering Spcy." The author of "Headlong Hall" not only devoted a special poem to the "Genius of the Thames," but loved the noble river, and haunted it all his life. His favourite amusement in old age was to take his family out on it for a row, and his bones lie in the churchyard of Shepperton, not far from its wave. The author of the "Reliques of Father Prout" devoted perhaps his best lyric to the "Bells of Shandon, that sound so grand on the pleasant waters of the river Lee;" and he, too, lies near the Lee, as Peacock does near the Thames, and Aytoun near the Forth—each amidst the scenery first loved and last forgotten of his ancestral land. Any one of them might have addressed a friend in the tenderest of all the odes of their common literary ancestor, the beloved Venustian lyrist:—

"Ille to mecum locus et beate  
Postulant arces; ibi tu caleutem  
Debita sparges lacrima favillam  
Vatis amici."

Having thus indicated in a broad rapid way the general elements of comparison between our writers, we shall follow the Plutarchian plan by giving a sketch of each of them separately, before attempting to make the comparison complete. The order in which they died happens also to be the alphabetical order, so that it is not our Scot-

tish patriotism only which has made us give Professor Aytoun the first place. Aytoun came of a good old Scottish family, now represented by Mr. Roger Sinclair Aytoun of Inchdairnie, the respected Member for the Kirkealdy Burghs. The family took its name at a very remote period from the lands of Aytoun in Berwickshire, and was first established in Fife in the sixteenth century by a gentleman who was Governor of Stirling Castle. Their arms were an engrailed cross with roses; and the founders of the Fife branch adopted a beautiful motto by way of difference on settling in their new home. "*Et decerptæ dabunt odorem*," they said, and the transplanted roses justified the modest boast. Sir Robert Aytoun, the poet, on whose tomb in Westminster Abbey the motto may still be read, was one of the Fife stock, of the house of Kinneven. The branches in the "East Neuk" of Fife seem to have dwindled away; but Inchdairnie, settled some seven miles to the north of Kirkealdy, held on, and has survived to our time, in spite of an interest in politics during great historical crises, which has been fatal to many a landed line. They produced Covenanters in the seventeenth century, and Jacobites in the eighteenth; and one of the Jacobites, who seems from the books which he left behind him to have been a man of science and letters, passed some time in exile in Holland. Of this family, and sprung, we believe, from their marriage with the daughter of a once well-known judge, Lord Harecarse, William Edmondstone Aytoun was a cadet; a fact which helps to explain his tinge of feudal sentiment and romance,—that old Scottish quality found in Scotsmen unlike each other in everything else—in Knox and Sir Walter, in Smollet and in Hume. He was born in Abercromby Place, Edinburgh, on the 21st June 1813, and was the son of Mr. Roger Aytoun, Writer to the Signet. He went to the Edinburgh Academy at eleven years of age, and in 1827 or 1828 to the College, where he remained till 1832. The head-master of the Academy at that time was Archdeacon Williams, a man of learning and wit, and author of several remarkable books, especially of a *Life of Cæsar*, which is far too little known. The classical professors of the College were Pillans and Dunbar, the first a Latin scholar of some elegance, the second a good teacher, as far as his range of teaching went. Aytoun benefited at least as much as his best fellow-students by this classical training; but the ancient literature had no special attractions for him, and he never knew it so well as either Peacock or Father Prout. On the other hand, he learned German in Germany,

and we have heard contemporaries of his describe his youthful enthusiasm for Macaulay's "Ivry" and "Armada," which, together with the influence of Scott, then the first intellectual influence felt by every young Scotsman, prepared him for the "Lays of the Scottish Cavaliers" by and bye. Nature had formed Aytoun for the Tory school of Scottish literature, but his father, who had been agent to the Duke of Hamilton, was a Whig, and the future Jacobite of *Blackwood* was for some time devoted to "the Bill, the whole Bill, and nothing but the Bill." The natural development of Aytoun's mind, however, brought him gradually into mere congenial associations, and he became a Tory of the special Scottish type then in fashion, and now extinct. We have nothing to do with politics on this occasion, but nobody, we think, will quarrel with us if we say as a mere matter of history, that this extinct type of Scottish Toryism—the Toryism of Scott and John Wilson—appealed not unnaturally to the hearts and imaginations of the young. It was a picturesque and patriotic Toryism for one thing, basing itself on the past, and especially on the past of Scotland. It was a *jolly* Toryism, in the next place, glorying in convivial riot, and delighting to express itself with unbounded freedom of humour and sarcasm. There is a fearful legend in Edinburgh that a song was sung at the Tory suppers of that day, the chorus of which was:—

"Curse the people,  
Blast the people,  
Down the lower orders!"

This was probably a Whig joke, but we need only to turn to the *Noctes Ambrosianæ* to see with what license of savage, yet somehow not essentially bitter jocosity, the great Christopher thought himself entitled to treat opponents; and with what a daring hand he claimed for himself and his friends the fiercest pleasures of the social board. An enemy was a "gander," a "stot," a "mean eunuch;" while a friend, besides the possession of every serious virtue, enjoyed a stomach to which no amount of supper and no long succession of tumblers could do the least mischief. There was something in all this fun which tickled the fancy of youngsters; and the effect of it is very visible in Aytoun's contributions to the Ben Gaultier Ballads, the chief effusions of his humour in verse. Mr. Theodore Martin had been writing for some time under the *nom de plume* of Ben Gaultier before he became acquainted with Aytoun, and the title was retained as a common designation when they began to work together in *Tait's Magazine* and *Fraser*. Most of the ballads were joint

handiwork, but a few of the best are known to have been exclusively Aytoun's, among which we may mention "The Massacre of the Macpherson," "The Queen in France," "The Rhyme of Sir Launcelot Begle," and "Little John." We quote the first of these, in spite of its being so well known on this side Tweed, because there is a dryness of sarcasm about it, which we have already declared to be essentially Scotch, as distinct from the satire either of England or Ireland:—

#### "THE MASSACRE OF THE MACPHERSON.

(From the Gaelic.)

##### I.

Fhairshon swore a feud  
Against the clan M'Tavish;  
Marched into their land  
To murder and to rafish;  
For he did resolve  
To extirpate the vipers,  
With four-and-twenty men  
And five-and-thirty pipers.

##### II.

But when he had gone  
Half-way down Strath Canaan,  
Of his fighting tail  
Just three were remainin',  
They were all he had,  
To back him in ta battle;  
All the rest had gone  
Off, to drive ta cattle.

##### III.

'Fery coot!' cried Fhairshon,  
'So my clan disgraced is;  
Lads, we'll need to fight  
Before we touch the peastics.  
Here's Mhic-Mac-Methusaleh  
Coming wi' his fassals,  
Gillies seventy-three,  
And sixty Dhuinewassails!'

##### IV.

'Coot tay to you, sir;  
Are you not ta Fhairshon?  
Was you coming here  
To fisit any person?  
You are a plackguard, sir!  
It is now six hundred  
Coot long years, and more,  
Since my glen was plundered.'

##### V.

'Fat is tat you say?  
Dare you cock your peaver?  
I will teach you, sir,  
Fat is coot behaviour!  
You shall not exist  
For another day more;  
I will shoot you, sir,  
Or stap you with my claymere!'

## VI.

'I am fery glad  
To learn what you mention,  
Since I can prevent  
Any such intention.'  
So Mhic-Mac-Methusaleh  
Gave some warlike howls,  
Trew his sklian-dhu,  
Au' stuck it in his powels.

## VII.

In this fery way  
Tied ta faliant Fhairshon,  
Who was always thought  
A superior person.  
Fhairshon had a son,  
Who married Noah's daughter,  
And nearly spoiled ta Flood,  
By trinking up ta water:

## VIII.

Which he would have done,  
I at least believe it,  
Had ta mixture peen  
Only half Glenlivet.  
This is all my tale:  
Sirs, I hope 'tis new t' ye!  
Here's your fery good healths,  
And tawn ta whusky duty!"

Aytoun's hand is very visible, we think, in "The Dirge of the Drinker," a parody of his own Lays, and a very spirited specimen of the rather extravagant comedy of his school:—

## "THE DIRGE OF THE DRINKER.

Brothers, spare awhile your liquor, lay your  
final tumbler down;  
He has dropped—that star of honour—on the  
field of his renown!  
Raise the wail, but raise it softly, lowly bend-  
ing on your knees,  
If you find it more convenient, you may hic-  
cup if you please.  
Sons of Pantagrue!, gently let your hip-hurra-  
ing sink,  
Be your manly accents clouded, half with sor-  
row, half with drink!  
Lightly to the sofa pillow lift his head from off  
the floor;  
See, how calm he sleeps, unconscious as the  
deadest nail in door!  
Widely o'er the earth I've waudered; where  
the drink most freely flowed,  
I have ever reeled the foremost, foremost to  
the beaker strode.  
Deep in shady Cider Cellars I have dreamed  
o'er heavy wet,  
By the fountains of Damascus I have quaffed  
the rich sherbet,  
Regal Montepulciano drained beneath its native  
rock,  
On Johannis' sunny mountain frequent hiccup-  
ed o'er my hock;  
I have bathed in butts of Xeres deeper than  
did e'er Monsoon,

Sangaree'd with bearded Tartars in the Moun-  
tains of the Moon;  
In beer-swilling Copenhagen I have drunk  
your Danesman blind,  
I have kept my feet in Jena, when each bursch  
to earth declined;  
Glass for glass, in fierce Jamaica, I have shared  
the planter's rum,  
Drank with Iighland dhuiné-wassails, till each  
gibbering Gael grew dumb;  
But a stouter, bolder drinker—one that loved  
his liquor more—  
Never yet did I encounter than our friend upon  
the floor!  
Yet the best of us are mortal, we to weakness  
all are heir,  
He has fallen, who rarely staggered—let the  
rest of us beware!  
We shall leave him as we found him,—lying  
where his manhood fell,  
'Mong the trophies of the revel, for he took his  
tippie well.  
Better 'twere we loosed his neckcloth, laid his  
throat and bosom bare,  
Pulled his Hobies off, and turned his toes to  
taste the breezy air.  
Throw the sofa-cover o'er him, dim the flaring  
of the gas,  
Calmly, calmly let him slumber, and, as by the  
bar we pass,  
We shall bid that thoughtful waiter place be-  
side him, near and handy,  
Large supplies of soda-water, tumblers bottom-  
ed well with brandy,  
So, when waking, he shall drain them, with that  
deathless thirst of his,—  
Clinging to the hand that smote him, like a  
good 'nn as he is!"

These pieces, and the "Queen in France," are on the whole the best things in the Bon Gaultier Ballads. The parody of Mrs. Browning, too, is good; but most of the parodies are ordinary enough,—not to be compared for a moment to the "Rejected Addresses," or to the "Prize Novelists" of Thackeray.

While Aytoun was thus amusing himself and the public, he did not neglect to place his interests in life on a solid basis than comic ballads can supply. He became a Writer to the Signet in 1838, and an Advocate in 1840. Afterwards he was appointed to the Sheriffship of the Orkneys, and to the Professorship of Rhetoric and Belles-Lettres in the University of Edinburgh. He was successful in both occupations, especially in the latter. But he owed his chief distinction all along to what he did in literature; and popular as his "Bon Gaultier Ballads," and his "Lays of the Scottish Cavaliers" were, they were neither of them more relished than some of his prose articles in *Blackwood*, such as "How we got up th Glenmutchkin Railway," and "How I stood for the Dreepdailie Burghs." These are fair representatives of his comic talent, and

comic talent, we repeat, was his *forte*. It was a talent quite inferior to Thackeray's in insight, delicacy, and edge; and to Wilson's in general power and swing. But it was a genuine gift of his own,—depending for its effect, not on style, in which he was never strong, but on its intrinsic force of humorous character. His humour was broad, we may add, and required plenty of elbow-room. What is further worth notice, it was almost never poetic humour, a strong sign that his poetry was not very real or deep, but much more artificial than either. In Hood, for example, the poetry and humour blend with each other; it is not easy to say where one ends and the other begins. But Aytoun's humour and poetry stand quite apart. Between the broad fun of "How I became a Yeoman"—another of his best *Blackwood* papers—and the life and kettledrum liveliness of the "Lays," there is no moral connexion visible. In short, all we ever read or saw of Aytoun induces us to think of him as a shrewd, able Scot, with a strong vein of the national humour, but whose poetry was mere cleverness exercised on the traditional material of his political school. His white rose was not waxen—we do not say that. But we do say that it had a very faint smell; that though his poetic Jacobite romanticism was real as far as it went, it did not go very far. The complete failure of his more ambitious attempts, his Lectures on Poetry in London, his "Bothwell," and his "Norman Sinclair," seems to us strongly to corroborate this view. And his mind, though of good quality, was not fertile. It produced a few fruits of very pleasant flavour, and much that was insipid and commonplace; whereas Peacock was as fresh in "Gryll Grange" as he had been half-a-century before; and Father Prout continued to write daily with sense and wit, to be always readable, never weak, till his death, at more than sixty years of age.

The latest of Aytoun's *jeux d'esprit* which made any considerable hit was perhaps the best of them all, "Firmilian; or the Student of Badajoz. A Spasmodic Tragedy. By T. Percy Jones." About a dozen years ago, there existed a bad school of poetry, encouraged by an absurd school of criticism, and owing its origin ultimately to the *Festus* of Mr. Bailey. No doubt there were men among them whose natural poetic power was greater than Aytoun's own. But the power was absurdly used; was employed on extravagant conceptions clothed in extravagant expression; and the result was something offensive to all who had formed their taste on the great models whether of antiquity or of England. Aytoun's sympathies

in these matters were sound; indeed, if they erred at all, they erred from a certain narrowness on the sound side. So he did what his talents exactly suited him for—wrote an elaborate squib on the juvenile offenders. Firmilian is a poetaster with a taste for sensuality, and a morbid hankering after crime, and his rant, in verses like the following, is an admirable imitation of the kind of stuff that was produced in all seriousness by our younger poets in 1853-4:—

"Let the hoarse thunder rend the vault of  
heaven,  
Yea, shake the stars by myriads from their  
boughs,  
As autumn tempest shakes the fruitage down;—  
Let the red lightning shoot athwart the sky,  
Entangling comets by their spooming hair,  
Piercing the zodiac belt, and carrying dread  
To old Orion, and his whimpering hound:—  
But let the glory of this deed be mine!"

The bard's taste in love was as eccentric as in poetry:—

"He had a soul beyond the vulgar reach,  
Sun-ripened, swarthy. He was not the fool  
To pluck the feeble lily from its shade,  
When the black hyacinth stood in fragrance by.  
The lady of his love was dark as Ind,  
Her lips as plenteous as the Sphinx's are,  
And her short hair crisp with Numidian curl:  
She was a negress!"

But while justice is thus done to the peculiar genius of Firmilian the poet, that of Apollodorus the critic is not defrauded of its due. He enters on the scene soliloquizing in this fashion:—

"Why do men call me a presumptuous eur,  
A vapouring blockhead, and a turgid fool,  
A common nuisance, and a charlatan?  
I've dashed into the sea of metaphor,  
With as strong paddles as the sturdiest ship  
That churns Medusa into liquid light,  
And hashed at every object in my way.

I have reviewed myself incessantly."

Firmilian no doubt helped to explode the now almost forgotten nonsense at which it was levelled. The "spasmodic school" no longer exists as a school; and any single member of it who has reached any position in letters has done so by emancipating himself from the absurdities of his youth. Unluckily, in some cases in which the extravagance was thought to be a mere excess of power, it has turned out that the power resided only in the extravagance. When the spasmodic poet has begun to write like other people, he has written worse.

Aytoun enjoyed no little convivial renown in his youth, for the same humour which belongs to his writing belonged to his con-



versation. So late as at the time of Thackeray's last visit to Edinburgh he made a capital *mot*. He told Thackeray that he did not like his "Georges" nearly so well as his "Jeameses." But in his later years a kind of mysterious languor came over him. He had suffered the most dreadful pain inflicted on mortals by any weapon in the armoury of doom—the untimely loss of a beloved wife,—Jane Emily Wilson, the youngest daughter of Professor Wilson, whom he married in 1849. His health failed, not abruptly, but gradually; and he seemed to lose his relish for society, and his interest in human pursuits. His characteristic face, with its yellowish beard, and the deep-seated twinkle of fun in its eyes, retained its interest; but he looked thin and feeble about the legs, and walked without vigour or decision of stride. He rallied, however, and entered into a second marriage. But the amendment was not permanent; and he died at a house he was renting in Morayshire in the August of last year. As a son and brother, Aytoun was at all periods of life beyond praise; he was much liked by his old intimates, and those who knew him in his best years; and if nothing worthy of his memory or of his Scottish popularity has yet been written about him in Edinburgh, it is some satisfaction to know that his surviving friend Mr. Theodore Martin intends to supply the deficiency.\*

We now turn to the English member of our triad of humorists, Thomas Love Peacock, author of "Headlong Hall," "Crotchet Castle," and other pleasant and clever books—all bearing that *cachet* of a distinctive character and intellect in the writer, which is the unfailing accompaniment of really superior parts. In these days, when so many "twaddling essays" are written, and when the pleasantries of our younger wags is too often mere Cockney garbage, we recur with delight to the vivid satire, manly sense, and brilliant scholarship of this distinguished, but not sufficiently known author. Mr. Peacock survived Aytoun; but he was already before the world when Aytoun first entered into it. He was born at Weymouth on the 13th October 1785, being the only child of Mr. Samuel Peacock, a London merchant, by Sarah, daughter of Mr. Thomas Love, who lost a leg as Master of H. M. S. "Prothee," in Rodney's action in 1782.† The father of Mr. Peacock died

early; and his mother removed to Chertsey, from whence he was sent to a boarding-school at Englefield Green, kept by a Mr. Dix, who was very proud of him. The lad loved books from the beginning, and even in his holidays delighted to read by the river-side, or in Windsor Forest—scenes which he continued to haunt all his life. When he was sixteen his mother settled in London, and Peacock received no further education. But Mr. Dix had evidently grounded his pupil well, for he went on closely studying the ancient writers at the British Museum; and it is certain that he was one of the men best read in the classics, of his generation. Though *αὐτοδίδακτος* he was not *ὀψιμαθής*, and therefore not obnoxious to the remark of Cicero that the *ὀψιμαθεῖς* are "insolentes." But he took a waggish pleasure always in having a hit at the universities, which he said did nothing for the classics but "print German editions of them on better paper." His youth was studious throughout. When his day had been spent at the noble library in Bloomsbury, he would devote his evening to reading aloud to his mother, a woman of superior understanding. He loved her as Gray and Thomas Brown loved their mothers, with a love beyond that of common natures. He consulted her judgment on all that he wrote; and some time after her death, he remarked to a friend that he had never written with any zeal since.

Peacock began his literary career with poetry. He published a poem called "Palmyra," as early as 1806, and another, "The Genius of the Thames," in 1812. When Shelley saw them both in the last-mentioned year, he took care to protest against the doctrine that "commerce is prosperity," or that "the glory of the British flag is the happiness of the British people," which he had found in the "Genius of the Thames." But he praised their "genius, information, and power," and went so far as to say that he thought the "conclusion of Palmyra" the "finest piece of poetry he had ever read." A personal acquaintance followed, and in 1813 Peacock was Shelley's guest. "He is a very mild agreeable man," writes Shelley to Hogg,\* in the November of that year, "and a good scholar. His enthusiasm is not very ardent, nor his views very comprehensive: but he is neither superstitious,

\* Mr. Martin's Memoir of Professor Aytoun is to be prefixed to a collection of his best prose writings.

† We must express our thanks here to Mr. Howes of the Adjutant General's Office, for obtaining us some particulars of the life of his friend Mr.

Peacock. We are also indebted to the distinguished painter Mr. Wallis, for the loan of an excellent portrait of him; and Mr. George Meredith has likewise favoured us with some reminiscences.

\* Hogg's *Shelley*, ii. 482.

ill-tempered, dogmatical, ner proud." Some of the queer people whom Shelley had about him in those days, and who figure in Mr. Hogg's eccentric but instructive book, did not like Peacock as well as Shelley did. "They have made an addition to their party," Miss Cornelia N— tells Mr. Hogg, "in the person of a cold scholar, who, I think, has neither taste nor feeling." The fact was that Peacock had too much sense, and too sharp an eye for a humbug, to be agreeable to the enthusiasts and sham-enthusiasts, who were then preying on and stimulating Shelley's weaknesses. It would have been well for the poet if he had had more such friends as Peacock instead of them. But he naturally knew a gentleman and a scholar when he saw him. The acquaintance continued; and Peacock accompanied the Shelleys on one of their journeys to Edinburgh. There is generally a Scotchman in Peacock's novels, which we must attribute doubtless to this visit.

The first of the novels in question was "Headlong Hall," which appeared in 1816, and to the type of which all its successors approximate more or less nearly. We know what the fashionable novel of 1866 is—either a photograph of commonplace life by an artist who sets up his camera at the drawing-room door as mechanically as his brother artist at Mayall's; or a literary Chinese puzzle, made up of all imaginable complications of crimes committed by stupidly unnatural puppets fobbed off on us for characters. The Peacockian novel is something quite different. It is a sort of comedy in the form of a novel, making very little pretension to story, or to subtle character-painting, but illustrating the intellectual opinions and fashions of the day, in capital dialogues; natural even in its most comic freedoms, and full of wit, satire, literature, and playfulness of every kind. Peacock had a favourite set of *dramatis personæ*, who reappear with more or less variety in most of his books. There is a cultivated squire, whose mansion forms a rendezvous for the company, and whose daughters or lady visitors supply occasion for the only half-serious love-making of the story. There is a parson of the old school, sometimes merely remarkable for eating and drinking, but generally a classical scholar and wit into the bargain. There is a Scotch philosopher of the *Edinburgh Review* type. And there are representatives of all the pet schools of speculation and sentiment in his day: the phrenologist; the Byronic misanthrope; the Coleridgean mystic; the perfectibility of the species man; and so forth. These people all get very fair play, even

when ridiculed, and are brought to the test of sound common sense, and of that kind of wit which has been described in the *Pall Mall Gazette* as "only sense sharpened till it shines." The politics of the author are not easily defined. Like many men who are literary rather than political, he seems to have been Conservative on one side of his mind, and Liberal on the other. He laughed at the "March of Intellect;" the glorification of the physical sciences; the worship of the multitude; and the novel schemes of education; of one class of his contemporaries. But he laughed also at the defences of rotten boroughs, and the high-flying Toryism of another class. He quizzed Brougham. He more than quizzed Southey, whom he somewhere calls "a Priapus set up to guard the golden apples of corruption." In short, he was a satirist, without being a partisan, and thought himself entitled to satirize whatever exaggerations he pleased, no matter in what directions the exaggerations tended. With regard to his place in the great schools of satire, just as we trace the pedigree of Churchill, through Dryden, to Juvenal, and that of Pope, in spite of grave differences, to Horace, so we call Peacock a child of Aristophanes. He had the gaiety; the dramatic freedom; the lively wit; the feeling for nature; the turn for song; all of which were possessed by

"The merry Greek, tart Aristophanes,"

of course on a greater and more brilliant scale.

In the first novel of the series, "Headlong Hall," the scene lies in the chateau of a Welsh squire, at which philosophers of all kinds of views are assembled, the usual parson being this time a Reverend Doctor Gaster, whose name suggests fun, and who supplies it. Here is a fragment of breakfast-talk—

"'The anatomy of the human stomach,' said Mr. Escott, 'and the formation of the teeth, clearly place man in the class of frugivorous animals.'

"'Many anatomists,' said Mr. Foster, 'are of a different opinion, and agree in discerning the characteristics of the carnivorous classes.'

"'I am no anatomist,' said Mr. Jenkinson, 'and cannot decide where doctors disagree; in the meantime, I conclude that man is omnivorous, and on that conclusion I act.'

"'Your conclusion is truly orthodox,' said the Reverend Doctor Gaster; 'indeed, the loaves and fishes are typical of a mixed diet; and the practice of the Church in all ages shows—'

"'That it never loses sight of the loaves and fishes,' said Mr. Escot.

"It never loses sight of any point of sound doctrine," said the reverend doctor."

The reverend gentleman gets into a curious but very natural after-dinner scrape, in the passage which we subjoin—

"The Reverend Doctor Gaster seated himself in the corner of a sofa, near Miss Philomela Poppyseed. Miss Poppyseed detailed to him the plan of a very moral and aristocratical novel she was preparing for the press, and continued holding forth, with her eyes half shut, till a long-drawn nasal tone from the reverend divine compelled her suddenly to open them in all the indignation of surprise. The cessation of the hum of her voice awakened the reverend gentleman, who, lifting up first one eyelid, then the other, articulated, or rather murmured, 'Admirably planned indeed!'

"I have not quite finished, sir," said Miss Philomela, bridling. 'Will you have the goodness to inform me where I left off?'

"The doctor hummed a while, and at length answered: 'I think you had just laid it down as a position, that a thousand a year is an indispensable ingredient in the passion of love, and that no man who is not so far gifted by nature can reasonably presume to feel that passion himself, or be correctly the object of it with a well-regulated female.'

"That, sir," said Miss Philomela, highly incensed, 'is the fundamental principle which I lay down in the first chapter, and which the whole four volumes, of which I detailed to you the outline, are intended to set in a strong practical light.'

"Bless me," said the doctor, 'what a nap I must have had!'

"Headlong Hall" contains one or two songs such as Peacock liked to introduce into his book; and Thackeray, we happen to know, thought his songs among the best of the age. There is a pleasant jollity in that which we select:—

"In his last binn SIR PETER lies,  
Who know not what it was to frown;  
Death took him mellow by surprise,  
And in his cellar stopped him down.  
Through all our land we could not boast  
A knight more gay, more prompt than he,  
To rise and fill a bumper toast,  
And pass it round with THREE TIMES THREE.

"None better knew the feast to sway,  
Or keep Mirth's boat in better trim;  
For Nature had but little clay  
Like that of which she moulded him.  
The meanest guest that graced his board  
Was there the freest of the free,  
His bumper toast when PETER poured,  
And passed it round with THREE TIMES THREE.

"He kept at true good-humour's mark,  
The social flow of pleasure's tide;  
He never made a brow look dark,  
Nor caused a tear, but when he died.

No sorrow round his tomb should dwell:  
More pleased his gay old ghost would be,  
For funeral song, and passing bell,  
To hear no sound but THREE TIMES THREE."

"Nightmare Abbey," first published in 1818, was the immediate successor of "Headlong Hall." The Abbey is the seat of Christopher Glowry, Esq., a gloomy gentleman subject to the blue-devils, whose only son and heir had been christened "Scythrop," "from the name of a maternal ancestor who had hanged himself one rainy day in a fit of *tædium vitæ*, and had been eulogized by a coroner's jury in the comprehensive phrase of *felo de se*; on which account Mr. Glowry held his memory in high honour, and made a punch-bowl of his skull." At this cheerful seat various visitors regale themselves—Flosky, a kind of caricature of Coleridge; Mr. Cypress, a Byronic poet, and others; including a Mr. and Mrs. Hilary, who bring with them an orphan niece, "a daughter of Mr. Glowry's youngest sister, who had made a runaway love-match with an Irish officer." The history of the unlucky gentlewoman is given by Peacock in a single most characteristic paragraph. "The lady's fortune," we are told, "disappeared in the first year; love, by a natural consequence, disappeared in the second; the Irishman himself, by a still more natural consequence, disappeared in the third." With her orphan daughter, his cousin, Scythrop, Mr. Glowry's heir, falls in love. But his father thinks the young lady too volatile for the family gravity, as well as too poor; and wishes him to marry Miss Toobad, the daughter of a Manichæan millennarian who believes that "the supreme dominion of the world was for wise purposes given over for a while to the Evil Principle; and that this precise period of time is the point of his plenitude of power." Scythrop contrives to fall in love with Miss Toobad, as well as with the other; and while he is unable to decide between them they both marry among his father's guests. This amusing position is the only thing like plot in the tale, the charm of which, as of all Peacock's stories, is not in the fable, but in the point and sense of the narrative and dialogue. There is an after-dinner conversation in "Nightmare Abbey" so clever in itself, and so curious as a picture of the humours of fifty years ago, that—barring a little abridgment here and there—we shall transcribe it in full:—

"Mr. Glowry.—You are leaving England, Mr. Cypress. There is a delightful melancholy in saying farewell to an old acquaintance, when the chances are twenty to one against ever

meeting again. A smiling bumper to a sad parting, and let us all be unhappy together.

"*Mr. Cypress (filling a bumper).*—This is the only social habit that the disappointed spirit never unlearns.

"*The Reverend Mr. Larynx (filling).*—It is the only piece of academical learning that the finished educatee retains.

"*Mr. Flosky (filling).*—It is the only objective fact which the sceptic can realize.

"*Scythrop (filling).*—It is the only styptic for a bleeding heart.

"*The Honourable Mr. Listless (filling).*—It is the only trouble that is very well worth taking.

"*Mr. Toobad (filling).*—It is the only antidote to the great wrath of the devil.

"*Mr. Hilary (filling).*—It is the only symbol of perfect life. The inscription, "*Hic non bibitur*" will suit nothing but a tombstone.

"*Mr. Glowry.*—You will see many fine old ruins, Mr. Cypress,—many reminiscences of the ancient world, which I hope was better worth living in than the modern; though for myself I care not a straw more for one than the other, and would not go twenty miles to see anything that either could show.

"*Mr. Cypress.*—It is something to seek, Mr. Glowry. The mind is restless, and must persist in seeking, though to find is to be disappointed. Do you feel no aspirations towards the countries of Socrates and Cicero? No wish to wander among the venerable remains of the greatness that has passed for ever?

"*Mr. Glowry.*—Not a grain.

"*Scythrop.*—I should have no pleasure in visiting countries that are past all hope of regeneration. There is great hope of our own; and it seems to me that an Englishman who, either by his station in society or his genius, or (as in your instance, Mr. Cypress) by both, has the power of essentially serving his country in its arduous struggle with its domestic enemies, yet forsakes his country, which is still so rich in hope, to dwell in others which are only fertile in the ruins of memory, does what none of those ancients, whose fragmentary memorials you venerate, would have done in similar circumstances.

"*Mr. Cypress.*—Sir, I have quarrelled with my wife, and a man who has quarrelled with his wife is absolved from all duty to his country. I have written an ode to tell the people as much, and they may take it as they list.

"*Mr. Hilary.*—I am one of those who cannot see the good that is to result from all this mystifying and blue-devilling of society. The contrast it presents to the cheerful and solid wisdom of antiquity is too forcible not to strike any one who has the least knowledge of classical literature. To represent vice and misery as the necessary accompaniments of genius is as mischievous as it is false, and the feeling is as unclassical as the language in which it is usually expressed.

"*Mr. Toobad.*—It is our calamity. The devil has come among us, and has begun by taking possession of all the cleverest fellows.

"*Mr. Cypress.*—There is no worth or beauty but in the mind's idea. Love sows the wind and reaps the whirlwind. The sum of our social destiny is to inflict or endure.

"*Mr. Hilary.*—Rather to bear and forbear, Mr. Cypress,—a maxim which you perhaps despise.

"*Mr. Cypress.*—Love is not an inhabitant of the earth. We worship him as the Athenians did their unknown God. But broken hearts are the martyrs of his faith, and the eye shall never see the form which phantasy paints, and which passion pursues through paths of delusive beauty, among flowers whose odours are agonies, and trees whose gums are poison.

"*Mr. Hilary.*—You talk like a Rosicrucian, who will love nothing but a sylph, who does not believe in the existence of a sylph, and who yet quarrels with the whole universe for not containing a sylph.

"*Mr. Glowry.*—Let us all be unhappy together!"

The reader who does not relish the cheerful vigour, the clearness, the fine sparkling salt of passages like this, which is, after all, only an average specimen of Peacock's manner, must have spoiled his palate by indulging in mawkish twaddle of one kind and another, or damaged his appetite by neglecting to take regular exercise on the hills of Attica and the banks of the Tiber. "*Nightmare Abbey*" was followed, in 1822, by "*Maid Marian*" in which Peacock goes back to the Robin Hood days, and carries his wit into the feudal forests, but which is chiefly remarkable for the freshness and grace with which he touches on silvan scenery, a kind of scenery dear to him (as already hinted) from a boy. To "*Maid Marian*" succeeded in the same year "*Crotchet Castle*," another story of his more usual type, but where a new class of the humours of the time were selected for pungent exposition and genial banter. One of his best scholarly parsons, Dr. Folliott, is in "*Crotchet Castle*," and says and eats many a good thing in the course of it; but we must not overload our pages with quotations. We must be content only to mention "*Melincourt*," one of the most daring of all his fictions, in which, with Aristophanic boldness, he has introduced a Sir Oron Haut-ton, who is nothing but a well-trained ape, into good society as a living character, and has even made him be elected to Parliament for a borough. "*Melincourt*" re-appeared in a cheap form in 1856.

It is now time to relate that Peacock, who had in 1809 gone to Flushing as under-secretary to Sir Home Popham, was in 1819 appointed to a situation in the "*Examiner's Office*" at the India House. He had six

weeks to prepare to be examined for the post, and his "passing papers" were returned to him with this short but high compliment,—one that might have been equally paid to his literary work: "Nothing superfluous, and nothing wanting." During the same year his friend Shelley writes to him about his poem "Rhododaphne": "Byron begs me to tell you he should not have the slightest objection to father your 'Grecian Enchantress.'"

During the years which followed, Peacock was an occasional contributor to distinguished periodicals; and wrote, especially, an admirable article on Moore's *Epicurean*, in the old *Westminster Review*. He also wrote, now and then, in the *Examiner* during its brilliant Foulblanquian period; and it is to be hoped that these essays will some day be collected. A new generation rose around him, to many of whom his name—the name of one who had written novels when Bulwer and Disraeli were children—was unknown. His vigorous and versatile mind employed itself in new directions. He planned vessels which weathered the Cape, as he had produced books which will weather the century; but so far was he from abandoning letters, that his genius had an Indian summer not a whit less full of life and colour than the summer of its prime. "Gryll Grange," published in *Fraser* some six or seven years ago, when Peacock was more than seventy years of age, is quite as fresh as any book of the "Headlong Hall" series, and even more remarkable than the best of them, for ingenuity, liveliness of humour, general vigour of wit and wide reading in literature. What is not less interesting about "Gryll Grange" is its similarity in tone and character to the author's novels of half a century before. His favourite views are not altered, only strengthened and confirmed. His favourite types are there,—the jovial accomplished squire, Mr. Gryll; the old-school parson, a *bon vivant* and classical scholar, Dr. Opimian; and Lord Curryfin represents the prevalent mania for lecturing, as Cypress and Flosky in "Nightmare Abbey" the melancholy and transcendentalism of a quite different world. There must have been a wonderful vitality about a man who lived to criticise the views, and laugh at the nonsense, of three generations; and who laughed as merrily at the third—that rising just now—as he had done at the first. Touching the plot of "Gryll Grange," we have not much to say. However improbable, it is ingenious; and every page of the book contains some sagacious, or humorous, or thoughtful thing, expressed with classic neatness and point. "Gryll Grange," too, contains perhaps the

very best verses that Peacock ever wrote—verses so good, indeed, that we reproduce them *in extenso* for the reader's enjoyment:—

#### "LOVE AND AGE.

"I played with you 'mid cowslips blowing,  
When I was six and you were four;  
When garlands weaving, flower-balls throw-  
ing,  
Were pleasures soon to please no more.  
Through groves and meads, o'er grass and  
heather,  
With little playmates, to and fro.  
We wandered hand in hand together;  
But that was sixty years ago.

"You grew a lovely roseate maiden,  
And still our early love was strong;  
Still with no care our days were laden,  
They glided joyously along;  
And I did love you, very dearly—  
How dearly, words want power to show;  
I thought your heart was touched as nearly;  
But that was fifty years ago.

"Then other lovers came around you,  
Your beauty grew from year to year,  
And many a splendid circle found you  
The centre of its glittering sphere.  
I saw you then, first vows forsaking,  
On rank and wealth your hand bestow;  
Oh, then I thought my heart was breaking,—  
But that was forty years ago.

"And I lived on, to wed another:  
No cause she gave me to repine;  
And when I heard you were a mother,  
I did not wish the children mine.  
My own young flock, in fair progression,  
Made up a pleasant Christmas row:  
My joy in them was past expression;—  
But that was thirty years ago.

"You grew a matron plump and comely,  
You dwelt in fashion's brightest blaze;  
My earthly lot was far more homely;  
But I too had my festal days.  
No merrier eyes have ever glistened  
Around the hearth-stone's wintry glow,  
Than when my youngest child was christ-  
ened:—  
But that was twenty years ago.

"Time passed. My eldest girl was married,  
And I am now a grandsire grey;  
One pet of four years old I've carried  
Among the wild-flowered meads to play.  
In our old fields of childish pleasure,  
Where now, as then, the cowslips blow,  
She fills her basket's ample measure,—  
And that is not ten years ago.

"But though first love's impassioned blindness  
Has passed away in colder light,  
I still have thought of you with kindness,  
And shall do, till our last good-night.  
The ever-rolling silent hours  
Will bring a time we shall not know,  
When our young days of gathering flowers  
Will be an hundred years ago."

There is a tenderness at the bottom of the playfulness of this, which reveals itself more and more after repeated perusals; while the simplicity and grace of its execution are truly admirable. We doubt if there is any single poem of Præd's equal to it, justly as Præd's talent for poetry of a similar kind is admired.

Some of the literary criticism in "Gryll Grange" is very valuable, and might be studied with advantage by our younger poets and critics. How much truth and suggestiveness there is in the dialogue which follows:—

"*Miss Hec.*—Truth to nature is essential to poetry. Few may perceive an inaccuracy: but to those who do, it causes a great diminution, if not a total destruction, of pleasure in the perusal. Shakespeare never makes a flower blossom out of season. Wordsworth, Coleridge, and Southey are true to nature, in this and in all other respects: even in their wildest imaginings.

"*The Reverend Doctor Opimian.*—Yet here is a combination, by one of our greatest poets, of flowers that never blossom in the same season:—

"Bring the rathe primrose, that forsaken dies,  
The tufted crow-toe, and pale jessamine,  
The white pink, and the pansie freakt with jet,  
The glowing violet,  
The musk rose, and the well-attired woodbine,  
With cowslips wan, that hang the pensive head,  
And every flower that sad embroidery wears:  
Bid amaranthus all his beauty shed,  
And daffodillies fill their cups with tears,  
To deck the laureat hearse where Lycid lies."

And at the same time he plucks the berries of the myrtle and the ivy.

"*Miss Hec.*—Very beautiful if not true to English seasons: but Milton might have thought himself justified in making this combination in Arcadia. Generally he is strictly accurate, to a degree that is in itself a beauty. For instance, in his address to the nightingale:—

"Thee, chauntress, oft the woods among,  
I woo to hear thy even-song,  
And missing thee, I walk unseen,  
On the dry smooth-shaven green."

The song of the nightingale ceases about the time that the grass is mown.

"*The Reverend Doctor Opimian.*—The old Greek poetry is always true to nature, and will bear any degree of critical analysis. I must say, I take no pleasure in poetry that will not. . . .

What do you suppose these lines represent?

"I turning saw, throned on a flowery rise,  
One sitting on a crimson scarf unrolled;  
A queen, with swarthy cheeks and bold black eyes,  
Brow-bound with burning gold."

"*Mr. Macborrowdale.*—I should take it to be a description of the Queen of Bambo.

"*The Reverend Doctor Opimian.*—Yet thus one of our most popular poets describes Cleopatra; and one of our most popular artists has illustrated the description by a portrait of a hideous grinning Æthiop. Moore led the way to this perversion by demonstrating, that the Egyptian women must have been beautiful, because they were 'the countrywomen of Cleopatra.' Here we have a sort of counter-demonstration, that Cleopatra must have been a fright, because she was the countrywoman of the Egyptians. But Cleopatra was a Greek, the daughter of Ptolemy Auletes and a lady of Pontus. The Ptolemies were Greeks, and whoever will look at their genealogy, their coins, and their medals, will see how carefully they kept their pure Greek blood uncontaminated by African intermixture. Think of this description and this picture, applied to one who, Dio says—and all antiquity confirms him—was 'the most superlatively beautiful of women, splendid to see, and delightful to hear.' For she was eminently accomplished: she spoke many languages with grace and facility. Her mind was as wonderful as her personal beauty. There is not a shadow of intellectual expression in that horrible portrait."

The interesting question thus mooted about Cleopatra demands, and would reward, a special dissertation. Here, we must be content to say, first, that it was not Moore, but Shakespeare, who "led the way" to what Peacock calls the "perversion" of making Cleopatra an Æthiop. Shakespeare speaks of her as "a gipsy,"—without any warrant from his original authority for "Antony and Cleopatra,"—Plutarch. Secondly, we must remark, that we wish the "genealogy" were more satisfactory. There is bastardy and obscurity, or both, at both ends of it! Ptolemy Auletes, the father of Cleopatra, was certainly spurious; and Cicero says in one of his Orations, that it was universally agreed that he was neither royal in race nor character: "*Eum . . . neque genere, neque animo regio esse, inter omnes video convenire.*"\* Granting, however, that he was the son of Ptolemy Soter, and thus seventh in descent from Ptolemy son of Lagus, the founder of the house,—who was Lagus? He is sometimes called a bastard of the Royal house of Macedon, and if so, he was certainly of Hellenic descent, for they established their Hellenic descent before being allowed to compete at the Olympic Games. But if, on the other hand, Lagus was a Macedonian, he was a "barbarian;" and in either case, who is to answer for the "purity" of the Greek blood of the

\* Cicero, *De Lege Agraria*, Or. ii. 16. See A. W. Zumpt's edition of these Orations, and his notes *in loc.* (Berlin, 1861.)

mothers either of the first Ptolemy, or the last? Thirdly, while unprepared to deal adequately with the "coins," we may mention that we once broached this very point to the late distinguished and lamented Professor Ramsay, of Glasgow, and that he immediately produced some silver coins, in which Cleopatra had anything but the true classic outline which Peacock claimed for her. At the same time, we commit ourselves to neither theory, but reserve the question *ad avizandum*. It will be a curious thing if the physical colour of Queen Cleopatra should remain in controversy for ever, like the moral colour of Queen Mary!

After what has been quoted from Peacock, and said about him, the reader will readily believe that he was an old-fashioned scholar, and gentleman of the old school to the last. Such was indeed the case. He told Mr. Thackeray, to whom we were indebted for the anecdote, that he now read nothing but Greek. He was heretical on the subject of Tennyson, and living poets generally. His favourite wine was Madeira. He consorted chiefly, out of his own private circle, with men of the past,—dining, we believe, nowhere except now and then at Lord Broughton's. He lived, as we have said before, near the Thames, and delighted in going on its waters; and he cherished an intention—never, unfortunately, carried out—of editing Sophocles. In these simple old-world pursuits he passed a vigorous old age; and his portrait now before us by Mr. Wallis, shows us a veteran with a fine massive brow, crowned with white hair, strong regular features, and a rather large mouth, instinct with character, the whole tinged with the reddish tints of a lusty English autumn. He died at Shepperton, near his favourite river, early in the present twelvemonth, having reached his eighty-first year.

Francis Mahony, Father Prout, the last of our little group of humorists, was born at Cork in the beginning of the century—we believe about 1804. Aytoun confined himself to Scotland with a tenacity that in our age exposed him to provincialism. He sometimes went to a German bath, or to Paris, or London, but even London was to him a kind of foreign city; and in spite of the demonstrative Bohemianism of his comic writings, it was easy to see that he lived under the dominion of the local traditions of "genteel" Edinburgh life. Peacock was a Londoner, whose heart, as we have said, clung to the Thames, and whose very scholarship was of purely English type, not borrowed, like too much of our modern scholarship, from the Germaus. But Mahony, though intellectually an Irishman to

the backbone, was, compared with these men, essentially cosmopolitan. He was as much at home in Rome as in London; in Paris as at Florence; and led a life resembling that of the men of letters of the sixteenth century rather than of those of to-day. Latin, he knew, not as it is known at schools and colleges only, but with the familiarity with which it was known to the Erasmuses and Buchanans: and he had a range of reading about the men of those times, which might be matched, perhaps, among a small circle of inquirers, but which certainly nobody else combined, as he combined it, with the wit and shrewdness, and experience, and popular talent of a successful journalist and magazinist. The secret of all this was his education on the Continent among the Jesuits. In early youth he was destined for the order, and went through their curriculum in Belgium, France and Rome. When he was still young, his talents must have attracted attention among their enemies, for in the *Jésuites Modernes* of the Abbé de la Roche Arnaud, a book published against them in Paris in 1826, when they were thriving under the sceptre of Charles Dix, a special article is devoted to "O'Mahoni, né en Irlande." "Je ne sais," the Abbé tells us, "s'il est parent du Comte de ce nom; mais à l'esprit, aux préjugés, et aux systèmes de M. le Comte, il ajoute le fanatisme, la dissimulation, la politique et tout le caractère d'un Jésuite. . . . *S'il était confesseur de notre bon Roi, il ferait de magnifiques auto-da-fé.* . . . La Compagnie destine le P. O'Mahoni à être à la tête des congrégations et des collèges. Elle lui fait, pour cela, connaître à fond les sciences diverses de la société, . . . et l'on espère que docile aux leçons de ses maîtres, le jeune O'Mahoni deviendra *plus insensible et plus cruel encore que les inquisiteurs les plus endurcis de Saragosse et de Valence.*" Prout used to be prodigiously tickled by this account of himself and of his probable development; and his copy of the Abbé Roche Arnaud's book is now before us, with the following inscription in his own writing: "*Handel over with great gusto to my biographer and friend, at Paris, Rue des Moulins, 1865, Aug. 12th. Frank Mahony de Saragosse.*" The truth is, that like many others, of whom the great Erasmus is the highest type, Mahony was a man of letters by nature, and a priest only by accident. There was a time in Europe when the two vocations were one; but we are drifting further from that tradition every day; and Mahony's transition from Jesuitism into literature was only one sign out of many of a movement going on all over the



world. Nevertheless, when he threw himself on London, and became a Fraserian—*circa* 1835,—his ecclesiastical education determined the form which his literary work took. He embodied himself in an imaginary "Father Prout" of Watergrasshill, near Cork, a priest of the old school, and attributed all his writings to that fictitious personage, whose name came to be familiarly applied to him, even in conversation. "He was one of that race of priests" such is Mahony's description—"now, unfortunately, extinct, or nearly so, like the old breed of wolf-dogs in the island. I allude to those of his order who were educated abroad before the French Revolution, and had imbibed, from associating with the polished and high-born clergy of the old Gallican Church, a loftier range of thought, and a superior delicacy of sentiment." This sentence is the key to much that was very characteristic in Mahony. He had strong sympathy with the aristocracies, both of birth and letters—with historical families, and with writers whose genius was enriched by learning; and he did not like the upstarts of either world. But he was, above all, a humorist; and hence, in the "Reliques of Father Prout," all his gifts and acquirements run to humour. And it is humour thoroughly Irish,—in its brilliance, its extravagance, and its waywardness of fanciful epigram;—a kind of practical joking in literature, as if he pulled a curule chair from under you just when you were going to sit down, or put Attic garlic into your omelette when your back was turned. To what else shall we compare a writer's telling us, in the "Rogueries of Tom Moore," that Tom stole his "Lesbia hath a Beaming Eye" from "an old Latin song of my own, which I made when a boy, smitten with the charms of an Irish milk-maid?" and gravely proceeding to produce the "original":

"Lesbia semper hinc et inde  
Oculorum tela movet,  
Captat omnes, sed deinde  
Quis ametur nemo novit.  
Palpebrarum, Nora cara  
Lux tuarum non est foris,  
Flamma micat ibi rara  
Sed sinceri lux amoris  
Nora Creina sit regina  
Vultu, gressu tam modesto,  
Hæc puellas inter bellas  
Jure omnium dux esto.

"Lesbia vestes auro graves  
Fert et gemmis juxta normam,  
Gratiæ sed cheu suaves  
Cinetam reliquere formam.  
Noræ tunicam præferres,  
Flante zephyro volantem;

Oenlis et raptis erres  
Contemplando ambulantem!  
Veste Nora tam decora  
Semper indui memento,  
Semper puræ sic naturæ  
Ibis teeta vestimento."

These comic translations were quite a fashion at that time, and were executed chiefly by clever Irishmen, such as Mahony, Maginn, Sheehan and Kenealy—the two last of whom still survive. Mahony's serious Latin verse, however, was very spirited, as his ode on Loyola—two stanzas of which may be repeated—shows:

"Tellus gigantis sentit iter: simul  
Idola mutant, fana runant, inieat  
Christi triumphantis trophæum  
Cruxque novos numerat clientes.

"Videre gentes Xaverii jubar  
Igni corusco nubila dividens:  
Cæpitque mirans Christianos  
Per medios fluitare Ganges."

This ode is in Prout's paper on "Literature and the Jesuits"—an admirable summary of the services of the order to the cause of letters. He had always a kindness for them from *that* point of view, though he maintained that they were steadily deteriorating in brains and scholarship, and he loved to trot out a forgotten father when the occasion offered. "What are you doing?" he asked a literary friend one day in the Strand. "A curious thing," was the answer, "an article on *The Beard*." "Ah," said Prout, "Laurence Beyerlinck, *Magnum Theatrum Vitæ Humanæ*—article *barba*!" The hint was taken, and proved a most valuable one; but the question was naturally put to Prout by his friend next time they met, "Who was Beyerlinck?" "A Low Countries Jesuit," Prout answered; "one of the old fellows that you Protestants are always running down;" and his eye gave a mischievous twinkle of pleasure. As may be supposed, the Father was a picturesque figure in his ecclesiastical garb—for he always retained it, more or less—among London journalists. He was esteemed for his reading, and might be consulted about most subjects; for you found him over the "Menagiana," or Erasmus, or Buchanan, in regions where the ordinary Cockney *litterateur* (whom he held cheap) is wholly at sea. But his chief impression was made by his wit and humour. He could stand up against the epigrammatic needle-gun of Douglas Jerrold; he was full of all sorts of anecdotes; and he had a great deal of curious gossip about known people—especially countrymen of his own—which he gave out fla-

voured with droll sarcasm. The humour of his talk was very similar to that of the "Reliques," as it is seen in the "Apology for Lent" and the "Rogueries of Tom Moore." It was a sparkling kind of fun, with none of the dry gravity of contempt about it which is so effective in the "Fhairsion" of Aytoan, but wilder in its mockery or sportiveness. Listen, for instance, to the learned pastor of Watergrasshill, haranguing—appropos of Lent—on the fastings of his race and Church:—

"I do not attach much importance to the Act of James I., who, in 1619, issued a proclamation reminding his English subjects of the obligation of keeping Lent; because his Majesty's object is clearly ascertained to have been to encourage the traffic of his countrymen, the Scotch, who had just then embarked largely in the herring trade, and for whom the thrifty Stuart was anxious to secure a monopoly in the British markets.

"But, when, in 1627, I find the chivalrous Charles I., your martyred king, sending forth from the Banqueting-room of Whitehall his royal decree to the same effect, I am at a loss to trace his motives. It is known that Archbishop Laud's advice went to the effect of reinstating many customs of Catholicity; but from a more diligent consideration of the subject, I am more inclined to think that the King wished rather, by this display of austere practices, to soothe and conciliate the Puritanical portion of his subjects, whose religious notions were supposed (I know not how justly) to have a tendency to self-denial and the mortification of the flesh. Certain it is that the Calvinists and Roundheads were greater favourites at Billingsgate than the High Church party; from which we may conclude that they consumed more fish,—a fact corroborated by the contemporary testimony of Samuel Butler, who says that when the great struggle commenced—

'Each fisherwoman locked her fish up,  
And trudged abroad to cry No bishop!'

"I will only remark, in furtherance of my own views, that the King's beefeaters and the gormandizing Cavaliers of that period, could never stand in fair fight against the austere and fasting Cromwellians.

"It is a vulgar error of your countrymen to connect valour with roast-beef, or courage with plum-pudding. There exists no such association; and I wonder this national mistake has not been noticed by Jeremy Bentham in his *Book of Fallacies*. As soon might it be presumed that the pot-bellied Falstaff, faring on venison and sack, could overcome in prowess Owen Glendower, who, I suppose, fed on leeks; or that the lean and emaciated Cassius was not a better soldier than a well-known sleek and greasy rogue who fled from the battle of Philippi, and as he himself unblushingly tells the world, left his buckler behind him: *Relicta non bene parmula*.

"Among European denominations, in proportion as the Celtic infusion predominates, so in corresponding ratio is the national character for abstemiousness. Nor would I thus dwell on an otherwise uninteresting speculation were I not about to draw a corollary, and show how these secret influences became apparent at what is called the great epoch of the Reformation. The latent tendency to escape from fasting observances became then revealed, and what had lain dormant for ages was at once developed. The Tartar and Slavonic breed of men flung off the yoke of Rome; while the Celtic races remained faithful to the successor of the "Fisherman," and kept Lent.

"The Hollanders, the Swedes, the Saxons, the Prussians, and in Germany those circles in which the Gothic blood ran heaviest and most stagnant, hailed Luther as a deliverer from salt fish. The fatted calf was killed, bumpers of ale went round, and Popery went to the dogs. Half Europe followed the impetus given to free opinions, and the congenial impulse of the gastric juice; joining in reform, not because they loved Rome less, but because they loved substantial fare more. Meantime neighbours differed. The Dutch, dull and opaque as their own Zuiderzee, growled defiance at the Vatican when their food was to be controlled; the Belgians, being a shade nearer to the Celtic family, submitted to the fast. While Hamburg clung to its *beef*, and Westphalia preserved her *hams*, Munich and Bavaria adhered to the Pope and to sourerout with desperate fidelity."

We have selected this specimen from the "Reliques" almost at random; but it is one very characteristic of the Proutian and Irish school of humour as distinct from that of Peacock and the English school, or Aytoan and the Scotch. There is a wild hilarity about it,—a deliberate dallying on the confines of nonsense, quite different at once from the English sprightliness of common sense, and the Scotch unctuous self-consciousness of critical humorous observation. Prout's genius, indeed, may be described in the words which he himself applies to his "Polyglot edition" of the *Groves of Blarney*, in Greek, Latin, French, and Italian. It is "a rare combination of the Teian lyre and the Irish bagpipe—of the Ionian dialect, blending harmoniously with the Cork brogue,—an Irish potato seasoned with Attic salt." With his various and grotesque pleasantry, however, Mahony combined an uncommonly shrewd sharpness of understanding, as well as a special literary talent of a high order, to which we owe his excellent serious translations. Among them, the best, we think, are his versions of the "Grenier," and "Les Souvenirs du Peuple," of Béranger; and of the *Septimi Gades*, *Vides ut allā*, and *Sic te diva* of Horace. The Venusian was his favorite out of all authors living or dead. He translated him, quoted

him, and punned on him, through life, having an especial knack (which his friend and brother Fraserian Thackeray also had) of applying his sayings to every incident that turned up.

The "Reliques of Father Prout" were first collected and published in 1836. They were republished with additions during Mahony's absence from England in 1859, and without his having an opportunity of revising them, which is to be regretted.\* Their appearance settled his claim to a place among scholars and humorists, and thenceforth his name was as well known in all literary circles of London where he would have cared to be heard of, as that of any man of his time. It is not in our power to trace his personal history in detail. He was a great deal abroad, and once held, for a short time, a collegiate situation of some kind in Malta. But his relations to his Church were not satisfactory. Whether the authorities at Rome hated his independence of opinion, his attacks on Ultramontanism and O'Connell, or whether they only did not like his free and easy life, his conviviality and cigars, we know not. Certainly, he became an unattached and unemployed priest, — a half-pay soldier of the Church, minus the half-pay, — and though always clad in black, of fashion more or less sacerdotal, he took his ease in his inn, and mixed his tumbler among the wits of the metropolis with perfect freedom. The "inquisitor of Saragossa" might be seen eating oysters in the Strand; the son of Loyola blowing a pleasant cloud in the Haymarket. Nevertheless, any low fellow taking liberties with Mahony's cloth, found himself most promptly put down. For the little Irishman had plenty of fire in him. And though a free-spoken and free-living man, who utterly despised humbug, and especially that species of humbug which is known as cant, the Father was too good a gentleman to tolerate the violation of any of the *essential* decorums of life.

For a year or two before and after the Revolution of 1848 Mahony wrote capital letters from Rome to the *Daily News*. He resided again in England for some time, but spent the last years of his life in Paris, where he acted as correspondent to the *Globe*. He occupied chambers in the Rue des Moulins; dropped into Galignani's reading-room and the *Messenger* office in the mornings; wrote at home in the afternoons;

and dined in the Palais-Royal or elsewhere. The loneliness and celibacy of his life developed a certain oddity which always belonged to him. His dress was curiously negligent. He looked up at you with his keen blue eyes, over his spectacles, turning his head on one side, like some strange old bird; told an anecdote, or growled out a sarcasm, or quoted Horace, with a voice still retaining a flavour of the Cork brogue; then making no salutation of any kind, and sticking his hands in his coat-pockets, he shot off, and his dapper little black figure disappeared round the corner. There was a half-cynical indifference to life, and even to literature, about the old Father in his last years; but, as the evening wore on, a strange little well of sentiment would bubble up in his talk, and remind you that he was the author of the "Bells of Shandon," as well as of endless epigrams. To a friend who dined with him in Paris last August, and who happened to speak of the splendour of the Madeleine, he said, "Yes; our Lord promised that she should be remembered wherever His gospel was preached; and she has the finest church in the finest city of the world." And when they parted, the little Father, with a half-humorous, half-melancholy smile, said, "You'll be doing *me* some day!" The prediction was verified; for he did not live many months afterwards. He breathed his last in the Rue des Moulins, attended by a sister, who had come over to see him, and by his friend, the Abbé Rogerson; and was interred, amidst many marks of public respect, in his native city, beneath the Shandon spire, and within hearing of—

"The Bells of Shandon,  
Which sound so grand on  
The pleasant waters of the river Lee."

The task of executing what Plutarch calls the *σύγκρισις*, the comparison between the humorists thus sketched, will not be a difficult one. We have indicated the features which they had in common, and we have glanced at the national differences between them, already. That their influence acted in much the same direction is perhaps the first thing to be remarked. They had all a kindness for the men of the past, and for the old models of thought and literature, and they all exposed and ridiculed the fleeting fashionable tastes of the hour. They were none of them mere *γελωτοποιοί*, mere laughter-makers, like the wags of the comic periodicals, but were capable of serious discussion, and of high-class work, such as translations and criticisms of the acknowledged masterpieces of the world. Aytoun's translations from the German are much es-

\* What is called the "new edition" of the present year, seems to be a mere reprint with a new title-page. The staleness of this trick is on a par with its morality.

teemed by German scholars; and Prout rendered two or three of Horace's Odes better than any contemporary. They had all a vein of poetry, and like the best satirists, could see the beautiful as well as the humorous side of life. But they all entered into the humorous side of it with a hearty gusto, with a certain *abandon* which distinguishes their satire from the cold, sceptical, and sneering sort, as well as from the frivolity and thinness of the satire of fashionable novels. In solidity of brains and of reading, Peacock, we suspect, was the first man of the triad. He has most invention of the three. His English is clearer, purer, and of more sustained vigour, and his wit has more of the classical symmetry, finish, and condensation than that of the others. In fertility of fanciful epigram and illustration, in habitual liveliness, in diversity of reading and knowledge, the travelled Irish Jesuit bears away the palm. The Scot's gift for humour is as undeniable as that of either; but he has far more heavy pages than either, and less elasticity, brilliance, and fecundity of mind. His scholarship, also, was inferior to that of both, and his style, while less vivacious than Prout's, was less elegant than Peacock's. On the other hand, his "Lays" seized a particular view of his country's history, and presented it with an impressiveness which had more actual effect on his contemporaries than anything that either Prout or Peacock achieved. It would be ungracious, however, to push this special part of the comparison too far. Our object is rather to recommend all three of these brilliant writers to readers still unacquainted with them, not only as humorists doing honour to their generation, but as instructive types of the varieties of genius existing in these islands.

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ART. IV.—*The Ethics of Aristotle*. Illustrated with Essays and Notes. By SIR A. GRANT, M.A., LL.D. London: Longmans & Co., 1866.

THE great merit of the work before us lies in its being a first, and in many respects a very satisfactory attempt, to exhibit in English one part of the Aristotelian philosophy in its connexion with the rest, and the whole in connexion with Platonism and the general course of philosophical speculation in Greece. It affords a corrective to the strange notion that Aristotle was a common-sense philosopher, uninfluenced by metaphysical "abstractions," and intelligible to those who are

wholly unversed in them. The saying that every man is born a Platonist or an Aristotelian has become almost a commonplace of literature. Its originator probably meant to express by it a distinction not so much of philosophical systems as of personal capacity; a distinction between the philosopher who is next of kin to the poet, and the one who is farthest removed from him. It is in the former sense, however, that it is generally received. It represents a current notion that there is a Platonic system and an Aristotelian, which are antagonistic; that the Platonic is "ideal," the Aristotelian "empirical." So erroneous a notion is in some measure excused by the difference of form with which the two philosophies are presented to us, but on closer examination even this difference does not appear so complete as at first sight.

Greek philosophy lived on discussion, and never took dogmatic form till its prophets had passed away. The dialogue was not a form into which the Platonic philosophy was artificially fitted. It was the reflex of that evolution by antagonism in which the philosophy originated. The same outward form is not retained by Aristotle, but the mode of philosophizing which it expressed is still unchanged. We have still the discussion going on under our eyes, but the speakers are not distinguished from each other. Under cover of the familiar *δοκεῖ* the philosopher pours out a string of detached propositions representing various points of view, without any express notice of their agreement or discrepancy, and the bewildered reader who fancies that he has reached his author's final meaning in one paragraph, finds it virtually contradicted in the next. It is as if the Platonic dialogue had been "sawn into lengths," and all the *callida junctura*, given by the play of conversation, left out. As with the form, so with the substance. The organism, which in Plato is presented to us instinct with the gracious activity of life and growth, we find in Aristotle fixed in the rigidity of death, to be taken to pieces and pondered in detail by anatomizing posterity. But it is the same organism. There is no joint or member in the system of the master which does not reappear, stripped to the bone, in that of the pupil. The great doctrine that the real is the intelligible and the intelligible the real, however imperfectly developed, is the foundation of both. If Plato is "idealist," Aristotle is more. If Aristotle is limited and thwarted in his idealism by the want of formulæ more elastic than those proper to number and magnitude, he less frequently lapses into the false dualism of soul and body, mind and matter, ideas and

things, which made Plato, against his principles, a mystic, and which has elung like a body of death to Platonizing philosophy ever since.

The community of view between Plato and Aristotle is the necessary result of their common relation to the earlier philosophers, and specially to Socrates. By his search for definition, Socrates had established as the primary question for philosophy, What is the nature of the object of knowledge? The thought which knows being found to be an essential factor in the object known, this question necessitates the further one, What is the nature of the activity of thought? On these correlative questions all subsequent Greek philosophy turned, till under the Stoics and Epicureans it exchanged the task of understanding the world for that of making life bearable. As in a special sense their originator, Socrates is the father of *Metaphysic* and *Logic*.

This may seem strange credit to take to one who is popularly known as having brought down philosophy from heaven to earth, as having discarded all speculation about the "nature of things," and directed man to know himself. It was, however, the very humility of his mission that forced him upon this high problem. In this lay its practical irony. He only wished to begin at the beginning; but in asking the most primary, and therefore apparently the simplest question, he was found to have raised the most profound. In and before his time there was abundant speculation in Greece as to nature and man's affairs. A sophist who had made the most of his opportunities—who had had good report of the dicta of Democritus, and had studied the dramatists and political oratory of Athens—might reproduce in the Athenian marketplace a philosophy of nature adequate to Lord Bacon's, and a theory of human rights and happiness at least as good as some that find admiring acceptance in our House of Commons. Such a reproduction, however, would be stopped at the outset by the Socratic requirement of definitions, involving, as it did, the question, What do I know, and how do I know it? It is as if the popular philosophy of our time were to be interrupted in its "generalizations from experience" by the question, with which no Socrates has yet constrained it to deal, What constitutes experience? By a short review of the position which this question has held in the course of modern speculation, we shall gain a vantage-ground for considering its relation to the old.

The great difficulty which now, as in ancient Greece, besets the entrance on the true path of philosophy, is that of reducing the

"sensible thing" to its primary simplicity. Philosophy does not precede, but follows, that actual knowledge of things, which it is its office to analyse and reduce to its primitive elements. It finds man, not as a child first opening its eyes on the letters of the alphabet, but as the scholar no longer conscious of the letters as distinct from the ideas which they represent. It finds him, that is, no longer simply receptive of sensations, but spontaneously referring them as properties to things, and regarding these things, like the words in a sentence, as determined in import by their relation to each other. When philosophy speaks to him, then, of the "sensible thing," he thinks of it as the individual basis of definite properties, of which he believes himself to have a direct knowledge through the senses. As such it is treated in those best samples of popular philosophy, the writings of Locke and his followers. From this view of the office of sense, a certain view as to the action of thought and the generality represented by common nouns necessarily flows. If sense gives the knowledge of the thing, as a definite complex of attributes, nothing remains for thought but to detach these attributes from the sensible thing and from each other, and recombine them. The residuum of this process is the "universal," whether regarded as an "essence" in the real world, or as a property which can be separated in thought from other properties, and from the thing to which it really attaches.

A more thorough analysis of the act of sensuous apprehension leads to a different result. Such an analysis, though the way to it was indicated by Berkeley, was first really attempted by Kant. Berkeley showed conclusively that the "sensible quality" of Locke was simply a sensation. Sense, as such, gives nothing beyond itself; it tells nothing of a matter to which sensations are referable as secondary qualities. This is the sum of the Berkeleian philosophy, which, taken by itself, is simply a reproduction of the old doctrine of Protagoras, that the only reality is the momentary sensation, that each act of sense is the measure or test of truth. Just, however, as the modern sensationist, having disposed of substance as a scholastic fancy, reproduces it under the name of a uniformity or permanent possibility of sensations, which, as sensations don't retain and compare themselves, presupposes a conscious subject to retain and compare them, so Berkeley reinstates the outward synthesis of sensations under the form of God, in whom they reside when we are unconscious of them, and throughout assumes the existence of a spiritual subject, without apparently observ-

ing that a sensation which is relative to such a subject is no longer a mere sensation at all.

The fault of the pure sensationalism of Berkeley is that, except so far as it resorts to something beyond sense, it will not account for the facts. It leaves the language and actual knowledge of men unexplained. It is clearly not enough to show that sensation gives no knowledge of a thing causing it, unless it is also shown how the notion of outward things which all human speech supposes came about. We do not talk of sensations, but of things, which our language assumes to be permanent, while sensations are transitory. As permanent we name them. If the permanence or generality corresponding to the name is not to be found in an outward thing, whence is it? Berkeley's answer is, that when we apply a general term we have before us an individual sensation, or image of a sensation, which we take as a sign for a multitude of other sensations, which we know to be like it. To this his present followers would add, that we take it also as a sign for other sensations, not like it, which have accompanied it in our past experience, and would accompany it now if the requisite conditions on our part were fulfilled. It is obvious that here the permanence corresponding to the general name, which is denied to the "thing," is simply transferred to a relation between sensations or a property which they have in common. This permanent relation, however, could not have been so observed as to give occasion to the employment of the name, unless the sensations themselves had been retained by us as permanent objects of consciousness. No doctrine of "association of ideas" will account for this retention. It will explain why a present sensation spontaneously calls up the image of a past one, as the sight of a whip recalls to a horse a past sensation of being beaten, and this again may account for an involuntary succession of noises. But a succession of similar noises is one thing, the appropriation of one such noise as a sign is another. Till I consciously presented a sensation to myself as a permanent object, no need of a permanent name for it could suggest itself to me. Now, a sensation transformed to a permanent object, which is there when my sensation is over, is no longer a sensation, but a "thing." If it be said that the object, like the application of the name, is not permanent but recurrent, still the sensation, as an object of which the recurrence is known, has ceased to be a sensation. Either in a "thing," or in a knowing subject, the permanence which does not belong to the sensation must reappear.

Nor is the actual knowledge of men any more explicable on this theory than their language. The exact sciences stand or fall with the "primary qualities of body." From these Berkeley withdraws the foundation on which Locke had established them without supplying any other. He shows clearly enough that mere sight cannot give the idea of "outness," nor, what it cannot do by itself, can it do in combination with the sense of touch, to which a similar criticism is applicable. Unless I refer the sensation of touch to a thing as its cause, of which it does not in itself give any knowledge, I cannot infer that that which I touch is the cause of the image on the retina of my eye. Now, extension has no meaning except as a property of an outward body. Either, then, the idea of extension, and with it geometrical science, must vanish, or some other source of ideas than mere sensation must be present in man.\* Physical science, again, rests on the distinction between what seems and what really is, between the nature of the thing and our sensation of it, which logically vanishes with Berkeley as it did with Protagoras. Why, when I thrust my hand under certain conditions into snow, do I say that it seems not, but really is, cold, unless I regard heat as a property in a thing which is there whatever my sensation may be? If it is answered that I say so because I *see* the mercury in the thermometer at freezing-point, this only throws the difficulty further back. Why was the thermometer invented to serve as a test of heat when the sense of touch failed, unless heat was regarded as a property, or dependent on a property, in a thing of which sensation was merely the sign? If it be said that the thing is resolvable into a general uniformity of sensation, the question will again arise, how, without the action of something other than sensation itself, the contrast between the present sensation and the general sensitive experience is to be accounted for?

The result, then, of the Berkeleian speculations, and the further questions which they necessitate, is that the "sensible thing" is

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\* Professor Bain (as quoted with approval by Mr. Mill in the *Examination of Sir W. Hamilton's Philosophy*, p. 232 and ff.) holds that the sense of muscular effort involves a sense of "degrees of range," which amounts to a measure of extension. This view derives its plausibility from the fact that when we talk of the contraction of a limb or muscle, we have before us, not merely a sense of effort, but (as we suppose) a visual image of a certain portion of extended matter, enclosed by the limb and divisible into "degrees." To this, as visual, the Berkeleian proof, that mere sight cannot give an idea of an outward body, applies. The sense of muscular effort, as such, is a sense of pain, and no more.



merely a sensation, and that a flux of sensations does not constitute knowledge. If an "observed uniformity of sensations" does, such uniformity must be relative to a uniting and discriminating subject. This result is simply a paraphrase of the barbaric enunciation of Kant, that a "synthetical unity of apperception" was the condition of an experience of things, which synthetical unity was supplied by the "Ego" or thinking self. A knowledge of things is a knowledge of their properties; the knowledge of a property can only be given in a judgment, and in every judgment is a colligation of terms by thought.

If we take as the germ of intelligent experience the simple consciousness of a sensation, this can only be expressed as the judgment—"something is here." The "here," however, is the next moment, a "there;" the one sensation is superseded by another. How, then, comes the one to be retained so as to qualify and be qualified by the other, unless there be a common and abiding unit to which each is relative, and which is a factor in the successive judgments, "this is here." It will not do to say that this unifying factor is a like property in the sensations; for there can be no consciousness of their likeness without comparison of them, and this presupposes just that retention of one sensation in relation to the other which it is the problem to account for. The stable element, then, must be the conscious subject, and the primary judgment must be not merely "this is here," but "this is here as an object to me." The simple judgment that a sensation is present—and it is only as judged of that a sensation can be the beginning of an intelligent experience—involves the presence of a permanent something to which the sensation is relative, which is a "universal," as being necessarily present to all other sensations with which the given one is to be compared and contrasted, and the most abstract of abstractions, as being that of which as yet nothing can be predicated, but simply that it "is." It is the possible substratum of all attributes, because the possible subject of all sensations. It is the mere "thing," the pure "being," the ultimate "matter," because it is Thought, as yet indeterminate and merely potential.

The "sensible thing" thus reappears no longer, however, as a "sensible" but as a "cogitable," not as a complex of attributes, but as the emptiest of abstractions. The antithesis between thought, as that in which we are active, and experience, as that in which we are simply receptive, vanishes, for thought appears as a factor in experience even in its remotest germs. Thought again

appears as a process of concretion, at least as much as of abstraction. Its progress is from, not towards, the most abstract universal. Its first assertion is that "something is," its earliest predicate is "pure being." Its subsequent process is one of abstraction, only if this term is used as equivalent to an analysis, which creates the order that it investigates, and every step in which is a further synthesis. By a succession of judgments, each manifesting in the copula the presence of the same unifying and distinguishing agent as the most primary, the chaos of sense is resolved into definite elements. One indeterminate sensation after another is determined by comparison and contrast with others, and as determinate is referred as a property to a thing, to become in its turn the subject of other predicates, the substratum of other properties, as the range of knowledge increases.

The unscientific man, if asked what an acid is, will say, perhaps, that it is that which sets his teeth on edge. The sensation is not merely such even to him. He has determined it by bringing it into relation to a certain phenomenon, which is itself the determinate result of a comparison of sensations. This relation, as something permanent, is expressed by a common name, and referred as a property to the things to which the name is applied. If the man of science defines an acid as a substance containing hydrogen, which when brought into contact with certain metals exchanges hydrogen for the metal, he has only carried the same process a long way further. He has determined a sensation by bringing it into relation to a long series of phenomena. Each determination has enabled him to apply a definite predicate to it, and at last he has reached that on which all the rest depend, which is present when any one of them is present. All thinking, from the simplest definition of one sensuous image by another which suggests a name, to the ultimate speculations of science, is of this kind. It is not a progress from the less to the more abstract, but from the less to the more determinate. It does not begin with determinate attributes which it abstracts from each other, but has itself to create them. If it separates one attribute from another, it is to make each not less but more definite in virtue of a new relation.

We are thus brought to a point of view whence we may distinguish two really inconsistent theories of knowledge running through Greek philosophy, each of which arrives at its most complete formulation in Aristotle, though in him they are still so blended as to present constant contradictions throughout his writings. On the one hand, there is the



view which first finds distinct utterance in the dictum of Heraclitus, that objects of sense, as such, cannot be known. The sensible is the indeterminate (*τὸ ἀνέκον*), and the becoming (*τὸ γινόμενον*). That which is known must be susceptible of definition and description. If I say that I have a knowledge of "this bed," as an object of sense, and try to describe it, it appears that I do this by its properties. These, however, as has been shown above, are not properly sensible, but intelligible. They are known in acts of judgment, in the very first of which the sensation is held in relation to a subject which is not sensible, while in the rest of them this bed is compared with other things, ceasing in the comparison to be seen or handled at all. In the technical language of Greek philosophy "this bed," as known, is not merely this bed, but a kind of bed, the subject of attributes which it has in common with other things. It is not a *τὸδε*, but a *τοιοῦδε*. If it is said that no description of the properties of a bed can be adequate to *this* bed, as present to my senses here and now, I must ask myself in what this presence consists. I can only know it by describing it, and can only describe it as an affection of sensitive organs at a certain moment of time, and in a certain circumscription of space. This again is a judgment in terms, expressing not what is sensible, but what is intelligible. The attempt to know the sensible at once transmutes it into the intelligible, or, as a Greek might express it, the object of sense, as such, is evermore *becoming* something which it is not. It can only be described as that which is incapable of description, only determined as the indeterminate, or, to take a figure from the sphere of art, it is a matter as yet without form; not, however, such a matter as the artist uses, already formed by the eternal Demiurge, but the negation of all form. In other words, it is nothing, for to be anything it must have a form of some kind. That, therefore, which alone is and alone can be known is the "form" (*ἰδέα* or *εἶδος*). The object of knowledge and the true reality coincide.

Such in outline is the result of the Greek "criticism of the sensible"—a result which to the modern reader, floating far down the stream of experience, and careless of tracing it to its source, seems either wholly unaccountable, or to be accounted for only as an expression of religious mysticism. With mysticism, however, the philosophy, which defined itself as a search for "the reason why" in all things, could in its period of health have no fellowship, and if its conclusions sound strange to our ears, it is not because the process by which they were arrived

at has long ago been refuted, but because it has long been ignored. There is a sense in which, as the domain of positive knowledge advances, the difficulties of metaphysical philosophy increase. The metaphysician, as he is told in depreciation, but with a certain truth, adds nothing to the sum of existing knowledge. His concern is with the analysis of that which is already known, and with the new synthesis of spirit and its object which results therefrom. Penetrating the intelligible world, he seeks to disentangle its elements and to "put them together" again, not as a ready-made material, but in the order of their origination. The more complex this world has become, the harder is it to "begin at the beginning."

The Heraclitean theory of the sensible (in itself not so much a theory as a prophecy), and the Socratic practice of definition, are said by Aristotle to have formed the philosophic parentage of Plato. The correlation of the two is obvious. The Socratic method implied that something was knowable, in such a way that its nature could be fixed in a definition. This could not be the object of sense, which, according to Heraclitus, was always in flux. What then is it that I know in a thing in virtue of which I apply a name to it? The answer of Socrates or his interpreters would be: It is the form, which is at once the thing as known, and the thing in itself. This again is a "universal." The thing, as merely sensible, is merely individual. It is given in a multitude of acts of sense, each separate from the other. The form, on the other hand—the sum of properties which make the thing what it is—remains the same throughout the succession of sensuous presentations, and is predicable of the whole of them (*καθ' ὅλου κατηγορεῖται*). As the thing is known under the sum of its properties, so also it exists as their unity. They at once account for it, or are its definition, and make it what it is, or are its cause. They are further the "mean" (*μέσον*) or possible middle term, by which it may be connected with other objects of knowledge. Thus the Socratic question, What is the thing? (*τί ἐστι;*) is equivalent to, What is the meaning of its name? and that which answers the question is at once the thing in its essence, the thing as universal, the form of the thing, its cause, and its connection with the general world of knowledge. On the conceptions involved in these terms, the antagonisms of the Aristotelian philosophy, its truth and its error, really depend.

The term "universal," correlatively with the "sensible thing," is the *crux* of philosophy. When a sensible thing has been so far defined by thought as to be an object of

knowledge, it is at once a "form." This form is real and essential, as contrasted with the mere object of sense. It is determinate, and therefore something, while that was nothing. It is also a "universal," for it is constituted by a relation to the thinking subject; in other words, by an intelligible property, in virtue of which it can be held together with any other objects presented to the same subject. So far the Platonist is right. But this determinate form is capable of infinitely numerous other determinations as it is brought into other relations. In other words, our first knowledge of a thing is not our ultimate knowledge of it; the first "form" is not the final one; the mere universal is a shell to be filled up by particular attributes. But it is our first knowledge of the thing that suggests a name, and it is on the insignificant superficial property connoted by the name that a class is constructed. Classification, it is to be observed, is of two kinds. The interest of scientific classification consists in the fact that the individuals formed into a class are known to possess other properties than that in virtue of which they are included in it. The classification thus constitutes a further determination of that property, and a further step in knowledge. It may be of scientific interest, for instance, to know how many animals are "mammal" because they are known to possess other properties the connexion of which with "mammality" may be of importance. The class, however, which may be formed in correspondence to any general name, is of a different kind. There is nothing in it which is not in each individual constituting it. The class as known and the individual as known, each involve a universal, and the class is but an "envisagement," by way of accommodation to sense, in a multitude of sensible things of the properties which constitute the object of knowledge. Now it was with the class of the latter kind that the Platonic philosophy, in a lapse of reason, came to identify the essential form and the universal. Hence two correlative errors. The identification of the essential form of a thing with the class corresponding to its name, implies that the form under which the thing is first known, which is only "essential" relatively to the nothingness of mere sense, is its true and ultimate form. To revert to an instance already given: the essence of an acid will be that it sets the teeth on edge, that being the obvious property by which the sensation is first defined in thought, and which is thus associated with its name. By the identification of the universal with a class, the true view of it is lost as soon as

it is gained. In the "critique of the sensible" it appeared as the relation to the knowing subject under which even the simplest objects are known. As such it is a property, as yet abstract, but capable of determination, by becoming in its turn the subject of successive judgments. As a class, however, it can only be the subject of judgments in which it is brought under a class more extensive than itself, *i. e.*, in which that is predicated of it which is already involved in it. By such a process its emptiness becomes yet more empty, and meanwhile the individual thing is asserting its independence. Instead of being regarded as that which becomes universal so soon as it is judged of or known, in virtue of the property under which it is known, it is connected with the universal as a thing with the class to which it belongs. In this position it is vain to deny its priority and independence. Thus individuals come to be regarded as one set of knowable things, universals another. But the "sensible," according to the ideal theory, is the merely individual. It is so because it is in no determinate relation to anything else, and therefore nothing positive. The mere individual, however, having by the wrong path just traced been raised to the position of a real entity, the "sensible" is so raised likewise. The ideal theory has built again that which it destroyed, and the sensible thing becomes, as such, the determinate subject of properties.

It is from this false view of the universal and the form—a view preserved in the ordinary use of the term 'species'—that the syllogistic theory of Aristotle, with the whole scholastic logic based on it, is derived, and it is this that has made it such a barren mother of science. Its futility in the direction of physical research was the result of a metaphysical mistake, and of a mistake which originated, as we have seen, in an accommodation to sense. The syllogism is properly a mere formulation of the answer to the Socratic question, *τί ἐστι*; We may suppose Socrates to have heard Aristides called the Just, and to have interposed with the inquiry, what justice was. It would be defined, perhaps, to consist in giving every man his due. This definition is the "reason why" (*λόγος*) the term "just" is applied to Aristides, or it is the middle term by which Aristides is brought under the general appellation. We thus get the syllogism—Whoever gives every man his due is just; Aristides gives every man his due; therefore Aristides is just. In order to get to such definitions, Socrates employed, we are told, "inductive arguments" (*ἐπακτικοὶ λόγοι*). The term expresses the exact nature of the pro-

cess as pursued by him. It consisted in bringing forward various cases in which a certain name, expressive of praise or blame, was applied. The consideration of what it was that these cases had in common, gave the essence of the virtue or vice in question. Now, it is clear that this process does not in itself constitute a further determination of an object imperfectly known. It supposes determinate knowledge of which the features have become dim, and have to be recalled into distinct consciousness. In order to ascertain the nature of a thing, it goes over the various instances in which its name has been applied, considering what in each case it was meant to convey. The only "essence" at which it can arrive is thus that which is involved in our existing knowledge of the thing, in virtue of which we have given it a name and made it the basis of a class.

Incidentally as applied to morals, the method had a far higher value. It was the correlative of the Socratic doctrine of innate moral ideas, and the method has a practical value, as the doctrine a practical truth. The truth of the doctrine lies in the fact that an unconscious always precedes a conscious morality; that men act on moral principles, embodied in law and custom, which have never distinctly become part of their individual consciousness. The value of the method lies in its power, as a process of self-examination, to awaken in a man the consciousness of the law on which, under higher guidance than his own, he has already been acting, and thus to transform it from an outward to an inward law, to be obeyed not on authority but in freedom, not under the limitations of local or temporary enactment, but in the open atmosphere of reason.

As systematized and applied however, by Plato (under the term *συμμετρίη*) and by Aristotle (under the term *ἐναγωγίη*), the method professes to be that which thought necessarily follows in learning to know—or, more properly, since with them things exist as they are known, in creating—the universe of things. It is that by which it ascends from sensible things to forms, and from the lower, *i.e.*, the less abstract and extensive forms, to the higher, *i.e.*, the more abstract and extensive. The process begins with the observation of a multitude of sensible things to which a common name is applied. Abstraction is made of the qualities in which these differ, and those in which they agree are retained as constituting their form. Another form having been arrived at in the same way, comparison is made of the two; that in which they differ is left out, and the like qualities which remain constitute a higher form, and so on. Thus a series of

forms is obtained of the kind known to school-logicians as the "logical tree" of Porphyry. The reverse process to this "*scala ascensoria*" is the "*scala descensoria*," in which an individual is brought under a previously given species, or a lower species under a previously given higher one, through a "middle;" the lower, middle, and higher being so called in respect of extension.\* This process of descent is called by Aristotle syllogism, by Plato division. According to both philosophers alike, the intelligible world consisted of a series of such forms, related to each other as the less and more abstract or extensive classes, along which thought moved up and down, in the manner here indicated.

The futility of this view, to which alone the scholastic syllogism is adapted, is so obvious as scarcely to need pointing out. It supposes the process of thought to begin where it really ends, and end where it really begins. It supposes it to begin with a knowledge of the thing, as a complex of determinate attributes, for unless the attributes are there, they cannot be abstracted; and to end with the simple predication of Being, which, as excluding all definite attributes, is virtually Nothing. As has already been shown, and as the Platonic "criticism of the sensible" implied, the real process is just the reverse. The first act of thinking or knowing is the judgment "something is," and the predicate of this judgment—"Being"—or the simple relation, which it expresses, becomes gradually a subject of more and more determinate properties, as in successive judgments it is brought into new relations. The syllogism or deduction, moreover, is simply the induction, so to speak, upside down. It adds on again the attributes which the induction had taken away. The induction having abstracted from "this, that, and the other" magnets all particular properties but that of attracting iron, the syllogism, or series of syllogisms, by dividing the "*summm genus*" in which this abstract property is envisaged, brings it again into connexion with the complex particularity of "this, that, and the other."

The fault of this crude "realism," it will be observed, whether Platonic, Aristotelian,

\* That the terms "major," "middle," and "minor" refer properly to extension, is clear from Aristotle's account of the "inductive syllogism," as that which proves a major of a middle through a minor. Here the minor term, which represents the individual things in which the property represented by the major is found, is middle in respect of position, but is called the minor, because the individual things separately are less in *extension* than the class which they constitute, and which is thus called "middle."

or scholastic, is that it is virtually nominalism. It holds the universal to be real, but it finds the universal simply in the meaning of a name. That the "sensible," as such, is unreal in so far as nothing can be predicated of it;\* that it becomes real, or a possible subject of properties, only by being fixed in relation to the thinking self, which relation constitutes a universal or common element between it and all other things; that thus the universal is real and in things, can be established by the most exact dialectic. Such realism is no enemy either to common sense or to scientific investigation. It admits in the fullest measure that the individual thing is real, and an object of knowledge, but maintains that it is so only in virtue of a relation which is universal, and without which the thing would have no intelligible properties at all. Its real universal is not, like the scholastic, bounded by the rigid limits of a class, and capable only of the relations of a geometrical magnitude. It is a unity essentially relative to a multiplicity. Like the thinking self, of which it is the reflex, it is capable of infinite determination, as in the motion of knowledge it is brought into new relations. It "lives through all life, extends through all extent, spreads undivided, operates unspent." But the realism of the ancient logic, taking for its reality the species denoted by a common noun, is doubly at fault. It makes its universal a class instead of a relation, and it takes as the essential attributes of the class those only which are connoted by its name, i.e., the most superficial. Having thus begun with a meagre conception as its first reality, it passes on in its process of abstraction to what is more meagre still, ending in that which has no properties at all. It is thus set at war at once with the common understanding and with actual science. The common understanding is scandalized by a doctrine which, allowing the sensible thing to be a complex of attributes, finds "reality," not in it, but in a class to which it belongs. It maintains irrefragably that such a class is a more compendious sign for a multitude of individual things. Science discovers that thought, according to the path marked out for it by the logician, can never arrive at anything new, but is for ever retracing the first steps of its childhood, which are repre-

sented by terms in received use—that it is working a treadmill, which, when it fancies itself laboriously ascending, brings it back to the simple predication of Being with which it really began.

The inadequacy, then, of the Aristotelian logic to the real world of knowledge, which led to the Baconian revolt, does not result from its being too "idealistic," but from its not being idealistic enough; from its virtual admission that there is a reality—the sensible thing as the complex of attributes—which is not an idea. False to the "criticism of the sensible" which showed the form, or thing as known, to be the sole reality, it has allowed that sense, as distinct from thought, gives an experience of things having definite properties. Give sensation this first inch, and it takes an ell. If sense gives a knowledge of properties, nothing remains for thought but to abstract and combine them, and it is vain then to re-assert for the data of thought, for its abstractions and "mixed modes," the dignity of the "things themselves." Thought has abdicated its proper prerogatives. It has admitted that experience is something given to it from without, not that in which it comes to itself. It inevitably follows that in what it does for itself, when not simply receptive of experience, it is merely draining away in narrower and more remote channels the fulness of the real world. We cannot know by abstraction, for properties must be known before they can be abstracted. If thought, then, is a process of abstraction—as it is according to the Aristotelian logic,—we think by other methods than we know. Thought, therefore, cannot give us knowledge, but only lead us away from it.

A philosophy, however, which had begun with the principle that the definite alone is knowable, and that thought alone defines, could not thus be lost in the shallows of a false antithesis. It is only because Aristotle has been known to the modern world chiefly through his logic, and through his logic as interpreted by the schoolmen, that his name has become associated with a splendid failure. In his other, and probably later writings, especially the treatise *De Anima*, and the *Metaphysics*, we find a more thorough and therefore truer idealism, which, inconsistent as this may seem with the ordinary notion of his relation to his master, sometimes appears most clearly in his polemic against Plato. It may already be disentangled, though amid much apparent confusion, from his theory (or one of his theories) of Definition. The place which the conception of "Matter" fills in this theory is inconsistent with its place in the

\* If it should seem absurd at first sight to speak in this way of the "sensible," when a physiologist can tell us so much about sense, describing minutely its conditions, a moment's consideration will show that sense, as known and thought of by the physiologist, is one thing; sense, as the germ of consciousness preceding thought, quite another.

theory of induction. According to the latter, "Matter" is constituted by the individual things which "are nearest the sense," and from which thought abstracts the properties which constitute the "form" or species. By a further abstraction of properties the "genus"—ultimately the "summum genus"—is arrived at, which thus stands at the end of the process farthest from "Matter." In the metaphysics, on the other hand, the "summum genus" itself appears as the "Matter," which is *formed* by successive *differentiæ* till the most determinate complex of attributes has been reached. Here we see that Matter has changed places. It appears itself as that abstraction of Being which was most remote from Matter according to the theory of induction. We are now on the traces of a true theory of knowledge as a process of definition. "Matter" with Aristotle is a relative term. It may either be the simple negation of all form—the absolutely unknown,—or it may be the less completely formed or known in contrast with the more completely. Matter, if of the former kind, may be called, in Aristotle's phraseology (with an unessential variation of its meaning), "matter as an object of sense: ἡ ἀσθητή"—if of the latter, "matter as an object of thought: ἡ νοητή." It is in the latter sense that the "summum genus," Being, is matter in relation to the formative process of definition. It is the predicate in the judgment "something is," which, as we have seen, is itself determinate or formed in relation to the absolutely formless matter of sense, but which has the minimum of form consistent with its being an object of knowledge at all. It is as yet void of all the qualities which will attach to it, as the process of differentiation, in which, according to Aristotle, definition consists, goes on. In the succession of forms which this process creates, each is a "matter" relatively to the more complex essence, which results from the addition to it of a differentiating quality, and, on the other hand, a form relatively to that which preceded the last step in its own differentiation.

Matter and form, then, are related to each other respectively at once as the more abstract and more concrete, and as the less and more perfectly or definitely known. The process of thought appears as one not of abstraction but of concretion. It "integrates" just so far as it "differentiates." Beginning with a simple assertion of being or identity with self, A is A, it goes on to bring A into relation to some other object, which in like manner has been arrested in its flux, "won from the void and formless infinite" of sense, by the magnetic *Ego*.

This relation gives a contrast, and difference. A is not B. But as not B it is something more than mere A. The difference has not taken something from it, but added something to it. It has not become a fraction of what it was before, but a fuller Integer. It is no longer a bare Unit, but a unity of differences, a centre of manifold relations, a subject of properties. It is not an "abstract universal," but it has an element of universality in virtue of which it can be brought into relation to all things else. Its universality is the condition of its particularization.

Such a theory of the process of thought does away with the false antithesis between experience and reasoning, between induction and deduction, between relations of ideas and relations of things. The first act of experience is the same in kind with all reasoning not simply rhetorical, and thought is as active in the creation of its materials as in their arrangement. A "determination by negation" is involved in the judgments "nearest the sense," as in those that are most remote from it. An object of sense, in being known, is determined as the negation of the knowing self, as at once related to it and distinct from it. Only as thus determined can it form the beginning of an experience, and act in turn as a determinant to other things, which are presented as different from it and its negation. Whether we are occupied in the acquisition of what we call new experience, or in the more thorough understanding of the old, the same process of affirmation by negation, of new assertion through new distinction, goes on. It cannot therefore be said that any reasoning which gives a new result is either purely *a priori* or purely *a posteriori*, that any knowledge is given either by simple induction or simple deduction. In the experience which seems most primary there is yet a *prius*, a something given to, not derived from, the experience, for there can be no experience without distinction, and no distinction without something from which to distinguish. In like manner, the "new instances" of induction, whether given by observation or experiment, would have no meaning unless in previous knowledge we had something by which to interpret them, and for them in turn to qualify. On the other hand, if deductive reasoning is to do anything more than, like the scholastic syllogism, state of individuals what has previously been stated of the class which they constitute, it must apply a received conception to a new case, whether the new case be given by construction, as in geometry and jurisprudence, by experiment, as in physical sci-

ence, or by a disentanglement of that which is implicit in the language, knowledge, and acts of men, as in metaphysics.

The antithesis between relations of ideas and matters of fact, the treatment of which by Hume was "the occasional cause" of Kant's *Critic*, though latent in the opposition between "necessary and contingent" matter, can scarcely be said to appear in Greek philosophy till after Aristotle. By Plato and Aristotle alike, things are supposed to exist as they are known, and to be known as they exist. Hence if "Universals" are the proper objects of knowledge, which Aristotle, no less than Plato, constantly affirms, they are also the real things, and if the cogitable world consists of a series of forms, corresponding to general names, and related to each other as the less and more abstract, such also is the real world. Scholasticism did actually proceed on this doctrine, and hence its philosophy of nature was a string of verbal propositions. The popular philosophy of modern times, so far as it has retained the old doctrine as to the procedure of thought, has only done so by regarding its order as the reverse of the order of real existence. Real things exist as individuals having properties, not as classes of greater or less extension. The process of life is one evermore leading to a greater complexity of attributes. Thought, then, as a process of abstraction, can only lead farther away from reality and life. Science, however, follows the order of nature. Its concern is with the relations of individual things to each other, with the simplest of which it begins and advances to the more complex. Its method, therefore, is at variance with the supposed method of thought, and while the one comes to be regarded as a simple registration of sensible experience, the other, as having nothing to do with the world, is relegated to the limbo of words mistaken for things. Ideas are "abstract universals," there are no "abstract universals" in reality, therefore the real and ideal must be mutually exclusive.

The view of thought as a process from the less to the more determinate avoids this antagonism. It exhibits the first idea equally with the first datum of experience, as the most simple and abstract possible, as having a minimum of form, *i. e.*, as relatively matter. It exhibits the idea, moreover, as no less individual than universal. As determinate, it is distinct from all other ideas, or individual; but this very distinction is only possible in virtue of a common relation to the thinking subject, which constitutes a universality. The real thing of intelligent experience unites the two sides of individu-

ality and universality in precisely the same way. It is a centre of relations, which constitute its properties. As differenced from all things else by the sum of these relations, it is individual, but to be so differenced from them all it must have an element in common with them. If it be said that it is individual, as momentarily presented to the sense, this very presentation can only be known or named, *i. e.*, can only have any meaning, as one property or relation of the thing amongst others. If then the thing of experience turns out to be what "thinking makes it," while, on the other hand, the motion thought is no other than the correlative "differentiation and integration," which constitutes the evolution of the phenomenal world, where is the obstacle to the admission that the world of experience is a world of ideas, or things as thought of, that its order is an order of thought, that in knowing it we do but realize ourselves?

It may be reckoned an extravagance to fasten such a view upon Aristotle on the strength of one aspect among many under which his theory of definition is presented to us. It must be remembered, however, that with Aristotle, as with Socrates, the object of definition is to ascertain not merely the meaning ordinarily attached to a name, but the nature of a thing at once as known and as it exists. So far then as definition consists in the gradual differentiation of an indeterminate matter, this represents also the order both of thought and of the world. It is quite true that in Aristotle himself there is no clear account of this differentiation except as a re-addition of qualities previously abstracted in the process of Induction. In putting the most abstract universal as "matter," according to the theory of definition, in the same place which the sensible thing, as a concretion of properties, occupies in the theory of Induction, he merely after his manner "shoots from a pistol" a proposition, which properly carries with it a complete transmutation of his theory of knowledge, but which he himself never followed to its consequences. The same antagonism, pointing for reconciliation to a higher philosophy than Aristotle's own, appears under several other forms in his writings, especially in his controversy with Plato on the conception of "substance" (*οὐσία*).

The Platonic doctrine of ideas rested on the view that the "sensible" was properly no *thing* at all, but the possibility of becoming something through the determining action of thought. The Greek language, by its use of the neuter gender in place of the substantive "thing," had special facilities



for the statement of this view, which, on the other hand, can only be stated in English (as a reader of the present article will observe) by what seems a pedantic use of the term "sensible." Notwithstanding this Plato is constantly lapsing from it into the notion that the "sensible" is equivalent to the individual thing, as qualified by properties. We thus get two separate sets of things, individuals which are objects of sense, on the one side; universals or ideas, which are objects of thought, on the other. To take one of Plato's own examples: this individual bed is one thing, an object of sense. The universal or ideal bed, which corresponds to the general term "bed," is something else. Having lapsed, however, from the view that the "sensible" is nothing, he still holds it to be something unreal,—a mere shadow of the truth; while the idea having become nothing in particular, is still asserted to be alone real and an object of knowledge. It is just this failure, through want of adequate formulæ, to maintain himself in his idealism, not the idealism itself, which justifies the popular notion that Plato was a dreamer who mistook shadows for things, and things for shadows.

The error is detected by Aristotle more clearly than its source. The universal, he says, cannot, as Plato supposed, be a separate, self-existent entity; it must attach as an attribute to things individual, and individual all things known as "substances" necessarily are. It is not something apart from, above, and beyond, sensible things, but in them, and, as such, predicable of them. The so-called thing in itself, or ideal thing, is simply the sensible thing, *minus* the attribute of being sensible.

In meeting these objections, the ideal theory necessarily comes to a better understanding of itself. That the idea, as Plato constantly treats it, is simply the sensible thing after abstraction of its sensibility, cannot be denied. Whatever can be predicated of "this bed" can be predicated of "bed in general," with deduction of the peculiarities of this bed, as distinct from others. But of "this bed" as sensible, nothing can be predicated, or, more properly, as merely sensible it is not a bed or anything else at all. According to Aristotle's own phraseology, it is absolutely indeterminate matter, and therefore has no proprieties, is unknowable. If by the sensible thing is meant the thing as first known—known, *i. e.*, under the minimum of determination requisite to any knowledge at all,—then Plato's "thing-in-itself" is simply identical with it. As it is constituted by the properties which are connoted by the general name first applied to the

thing, and as the application of such a name is coincident with the earliest knowledge of it, it is nothing more than the thing in its most obvious aspect. It is indeed, unlike the merely sensible, a real object of knowledge, but the poorest possible, and a method like the Platonic, which takes it as the fullest and ultimate object, contains no principle of progress.

The assertion of Aristotle against Plato, that the universal is not to be found apart from "sensible things," but attaches to them, has been strangely thought to be an abandonment of the doctrine of the reality of universals. It can only be so on the supposition that a thing is more real than its properties. It can only be on such a supposition that Mr. Mill, having maintained that names are names of *things*, treats the doctrine of "general essences" as a scholastic absurdity. Yet, a common name, to use his own language, connotes an attribute or attributes. If it is also the name of a thing, the attributes or general essence must constitute a thing. It makes no difference to say that the common noun "denotes" a thing, while it "connotes" an attribute, for it denotes the thing only in virtue of connoting the attribute. If the individual "bed" is something apart from its properties—if it alone is properly real, while they are not,—then to say that the general essence "bed" means the properties which attach to individual beds, is to admit that general essences are not real. This doctrine, however, is simply to restore the notion of an "unknown substratum of attributes" (for such is the individual bed without properties), against which the enemies of realism are apt to be severe. If, on the other hand, the individual thing is what it is in virtue of its attributes, if these constitute its reality, then the Aristotelian doctrine, by treating the universal as a property or sum of properties, while it in no way modifies the reality which Plato ascribed to it, avoids the error of admitting a quasi-reality in distinction from it. That which can be predicated of the sensible thing, in other words, that which can be known about it, is the essence, and an object not of sense but of thought. This view of the essence or form properly prevents (though it did not always prevent with Aristotle) the shallow conception of it as a class, and renders it capable of further formation or development with the progress of knowledge.

Aristotle's reiterated statement, then, that the universal is not "separable," but implies something to which it attaches as an attribute, really amounts not to an abandonment of the Platonic "idea," but to a resolu-



tion of it into two correlative elements. What Plato had spoken of indifferently as "form," the "universal," "essence," and "substance," emerges from the Aristotelian crucible, as, on the one hand, "substance," which is individual, "separable" (*χωριστόν*), and "subject" (*ὑποκείμενον*); as on the other, "form," or "essence," which is universal and the attribute of a subject. The conception of individual substance having thus presented itself, requires the same purgation from sense as the "real thing" of experience, a purgation which at Aristotle's hands it only partially receives. Hence his statements concerning it seem at first sight to be in hopeless contradiction with each other. Substance, he tells us, is necessarily individual, and as individual, it "has matter." Matter, however, is properly unknowable, because indeterminate. Yet, elsewhere, he speaks of individual substance as the proper object of knowledge, and as determinate in opposition to the kind (*τὸ τοιούδε*). Substance, again, according to him, as individual, is an object of sense; yet, for the same reason, it is a definite something, while the sensible is the indefinite. Substance is that which remains when all attributes have been abstracted, yet it is also the concretion of attributes, supposed to be given by sense, with which the abstracting process of thought begins. To this web of apparent contradictions (which might be greatly extended) Aristotle supplies no sufficient clue. In the *Metaphysics*, indeed, he twice sums up the significations of "substance." It is either, he says, the "subject-matter," or the "form," or the individual thing compounded of the two, *i.e.*, the subject-matter as formed by properties. As the mere form substance is the so-called "secondary" or improper substance of the treatise on the categories; as the individual thing, having properties, it is the "primary" or proper substance of that treatise. So far the two passages in the metaphysics agree; but there is an important difference. According to one passage, substance, as "subject-matter," has sensible or phenomenal qualities; according to the other it is the negation of all qualities, the "*caput mortuum*," or "unknown substratum," from which everything determinate has been abstracted.

The truth is, that the elements into which Aristotle resolves the intelligible world, are not fully conceived of by him, as determinations of a creative spirit, which reflects itself in things. To him they are rather fixed elements in a world presented from without. Hence the sequence and dependence of one on the other are not clearly seen. The thread of spiritual unity on which they all

hang escapes his grasp. They appear in hard juxtaposition, instead of as a rhythm where each member is different from the rest, but different solely in virtue of its relation to them. The thinking self is individual, as exclusive of all things. But it excludes all things as the negation of each in particular, and such negation is a relation. Therefore, as exclusive of them all, it is in relation, or present, to each of them: it is an omnipresent element or universal. The individual has thus transformed itself into the universal in virtue of its particularity or definite relations. The process may be reversed. The thinking self is present to all objects of consciousness, not here or there, but continuously. It is only in virtue of this presence that they are what they are; without it they would be in "disconnexion, dead, and spiritless;" and thus it is a universal element. But it is related to all these particular objects as their negation; it is not any one of them in particular. Thus it is exclusive of them all, or individual. As the individual self is universalized, so the universal is individualized, through its particular relations.

"Substance," as the outward thing, is but the reflex of the inward subject, and involves the same correlative opposites. It is individual or exclusive of all things but itself; otherwise it would be no object of definite knowledge. But it is not *merely* individual. If it were, it would be, as it is sometimes presented to us by Aristotle, an indeterminate, and therefore unknowable "matter." It would be out of relation to other things, and relations alone constitute the determinate properties in virtue of which a thing is known. As known, it is in implicit relation to all things else, on the principle that one item of knowledge ultimately qualifies every other; in other words, it involves an element in common with them, a universal. It is an individual universalized through its particular relations or qualities. Here again the process may be reversed. If there is no universal element in things known, there can be no unity of knowledge or community of thought. But this universal is not merely such. If it were "ever the same," so as to be void of all distinction, like the shadowy goal of the Platonic dialectic, it would be, as it in turn is exhibited by Aristotle, the indeterminate and unknowable. It must be that which is the negation of all particular relations so as to be determined by the sum of them. In virtue of this negative relation, as identical with itself in exclusion of all things, it is individual. It is a universal individualized through its particularity. Thus we see that the *πρώτη*

*οὐσία*, or individual substance, and the *δευτέρα οὐσία*, or essence constituted by general attributes, are not to be placed, as Aristotle placed them, over-against each other, as if one excluded, or even could be present without, the other. They are as necessarily correlative as subject and object, as the self and the world. Each, by its native energy, which is the hidden "spontaneity" of thought, necessarily creates its opposite. Nor is one, as Aristotle supposed, in any special sense, "matter," the other "form." Each, taken by itself, is matter, as the indeterminate and negation of the knowable. Each, again, so taken, is matter, as the "subject" (*ὑποκείμενον*), receptive of a form—of a form, however, not imposed from without, but projected from within. Each, lastly, may be regarded either as a void "substratum," or as a complex of attributes, according as it is isolated or regarded in the realization which it only attains by passing into its opposite.

The crudity in the philosophical digestion of Aristotle, which prevented the due fusion of the correlative meanings of *οὐσία*, was the notion—our old enemy—that the individual substance, as matter, was given by sense, and yet had determinate properties. This brings him into collision with his own principle, that the matter of sense, as indeterminate, was unknowable. The "object of sense" and the "individual" he constantly uses as equivalent terms. Yet he could not but see that the mere individual, as out of relation, and thus unqualified, afforded no beginning for knowledge. Thus when he treats the "sensible thing" as constituting such a beginning, he is obliged to explain that it is not merely individual, not a simple "this" (*τὸδε*), but of a kind (*ταῦτόδε*). The general essence, however, which makes it a *ταῦτόδε*, and which it must involve in order to be an object of knowledge, is given, says Aristotle, in a definite "here" and "now." This individuality of presentation in space and time he seems to have considered the differentia of the "sensible thing." It at once constitutes its materiality, and is a determination of it. Hence the contradiction between his view of matter, or the sensible element, as indeterminate, and his view of it as determining, in the sense of individualizing, the thing known. The *αἰσθητόν* with him, as the qualified object of knowledge presented in limits of space and time, thus corresponds to the object of intuition, as distinct from sensation, of Kant.

Presentation in an individual "here" and "now" is undoubtedly the condition of the first objects of knowledge. If, then, it is itself sensible, sense must at least be an element in the constitution of intelligent expe-

rience. The "here" and "now," however, are not seen, or heard, or handled. As has been pointed out, the sensible "here" has, while I write it, become a "there," the sensible "now" a "then." We may call the sensible "heres" and "nows" an indistinguishable succession of points or moments, "each changing place with that which goes before;" but in the very act of naming, *i. e.*, of knowing them, we transmute them. For the flux of points and moments we have fixed categories—the "here" and the "now" in general—objects of intelligent consciousness. In like manner, the "presentation," as soon as named, becomes a general attribute of things. As it is to the sense, momentary and isolated, it is unnameable, for a name is permanent, and represents a permanence, while it is the negation of permanence, yet not determined by this negation; for if so, it would cease to be momentary and individual.

The "presentation in a here and now," to which, according to Aristotle, the sensible or material element in knowledge reduces itself, is thus a general predicate, expressing a general attribute of objects of knowledge. It is a predicate, however, which is in perpetual process of self-negation. As the individual necessarily passes into the universal, so the limitation in space, which is but a first (though necessary) envisagement of individuality, as a condition of things known effaces itself. It is true that I necessarily present to myself all things, which I regard as outward, as external to and limited by each other, *i. e.*, under the form of space; but this very limitation implies a relation of each to the other, which constitutes an element of absolute continuity, the negative of spatial limitation. If again I am necessarily conscious of my own thoughts and feelings as in succession to each other, *i. e.*, under the form of time, this of itself implies the undivided presence of the thinking self to each as an absolute stability in relation to which alone succession has any meaning.

Thus placing ourselves outside the process by which our knowledge is developed, we see that its sensuous conditions are only knowable under categories which sense itself does not supply. But to us, who are within the process, these conditions have a different meaning. They form the element of imperfection in our knowledge. In us, as not simply contemplative of animal life in its properties or essence, but ourselves animals, knowledge is developed through the action of sensitive organs. These, indeed, can of themselves give no knowledge apart from the distinguishing and unifying self which makes them its vehicle. Except in relation to this

self, their "reports" are in the strictest sense unmeaning, for they present things either in mere detachment or mere continuity. Yet, as acting through them, it is subject to a necessary delusion, the continued removal of which, never-ending, still-beginning, gives an essential character to human knowledge as at once imperfect, and, through its imperfection, progressive. We learn to know things "piecemeal," and inevitably mistake the piece for the whole. Each object, as known, is indeed in relation to all other things—the divine æther which permeates the world is also in it,—but the relation is to us at first potential, not actual, and must always remain so in proportion to the limitation of our knowledge. Its universality, like that of the self of which it is the reflex, is thus *so far* an abstract universality. It is not yet all things in one; nor yet a centre on which all relations of the intelligible world actually converge, any more than the subject in us, though that to which the whole variety of the world is relative, is yet actually so determined. As the self can only realize its universality through the experience of the world, so each substance only gathers to itself the full universe of its attributes in the progressive development of knowledge. Yet, through the delusion of sense, each successive accretion of attributes is taken for the last. As sin consists in the individual making his own self his object, not in the possible expansion in which it becomes that true will of humanity which is also God's, but under the limitation of momentary appetite or interest, so intellectual error consists in regarding the relations under which at any given time, an object is presented to us, and which, through the limitations of sense, are necessarily partial, as the totality of its relations. As, moreover, to one looking on the process of moral action from without, evil would be "inchoate good," though it is not so to us who are within the process and will the evil, so, although to one looking at the development of knowledge from without, error might be partial truth, yet it is not so to us who believe it to be complete.

We are now in a position to review the senses in which, according to Aristotle, matter attaches to the individual substance, and to show their mutual relation in a way which, from his point of view, was impossible. The matter, which attaches to it as *individual*, does indeed determine it, but only as a matter which ceases to be matter, for, as we have seen, it is only the individuality which transforms itself into the universal, not one simple or absolute, that belongs to anything known. The matter which consists in a presentation in a particu-

lar "here" and "now" is a determination of substance only as a mode of the individuality just described, and "sublates" itself in the same way. Finally, the matter, which attaches to it as a supposed object of sensuous perception, unknowable because indeterminate itself, can only be described by its relation to the knowable as that which makes knowledge imperfect. Thus matter has really the same meaning throughout. It is in itself the indeterminate and unknowable, which becomes determinate and knowable either as passing into the formed, or as the chaos of ignorance which for us surrounds each spot of dry land won to the orderly world of intelligence, but of which the shore is evermore receding.

It is as the element of imperfection that "matter" appears in the Aristotelian definition of the form or essence as the proper object of knowledge. This, he says, is "substance without matter" (*οὐσία ἀνευ ὕλης*). It would be easy to show, taking our account of matter from Aristotle himself, that this definition involved a contradiction in terms. If, as he says, the individual is the sensible, and the sensible is "in matter," that which is without matter cannot be individual, and as substance is necessarily individual, cannot be substance. In his definition of the essence, however, or thing so known, Aristotle attains the true view of matter, as simply the negation of the knowable. We have previously seen that the minimum of knowledge, which can form a beginning of conscious experience, may be expressed as the judgment, "something is." Here, in the first place, we have an individual substance, as subject of the judgment. As merely individual, however, it is indeterminate matter, and unknowable. In the act of knowing it, we universalize it. We predicate "being" of it, which means that we fix it as an object to the self, and in virtue of this relation it has a universal element by which it may become related to other things. In other words, in knowing it, we strip it of its mere individuality or matter, and substitute for this an intelligible individuality formed by its relations, which involve a universal. Thus, because individual, it is still *οὐσία*, but because intelligibly individual, or as the subject of general attributes, it is without matter. The attributes of the thing, however, or the relations which constitute them, are still not actually known. To know the thing at all—to know that *it is there*—we must individualize it as the subject of infinite relations; but these are still to us potential, not actual. Thus though as known to a certain extent, it is "without matter," yet as girt with an infinite margin of indeterminate darkness, it is still deep in matter.

In other words, every form relatively to the unknown, or less known, is an *οὐσία ἀνὲν ὕλης*; relatively to what will ultimately be known, or the higher form, it is *μετὰ ὕλης*.

It is as thus conceived of—as individual substance, yet individual only as the subject of general attributes—that the formal essence takes the place in the Aristotelian system, which the idea, as a mere universal, or as a class without individuals constituting it, held in the Platonic. It is at once the object of knowledge and the real thing. The philosophical advance involved in this substitution will become clearer after consideration of another pair of correlative terms, the application of which is the most purely original contribution of Aristotle to philosophy. These are the “potential” and the “actual,” of which we have already availed ourselves by anticipation in exposition of his view.

The terms *δύναμις* and *ἐνέργεια*, as used by Aristotle, are only to be understood in the strictest relativity to each other. The *δύναμις* is to the *ἐνέργεια*, for instance, as the shapen block to the finished statue. The shapen block in turn, would itself be an “actuality” relatively to the unshapen, which again would be one relatively to its constituent elements. The “potentiality,” as such, is indeterminate. The sculptor’s block is relatively to the statue indeterminate, for it may be fashioned to the likeness of this man or that. As compared with the rock, on the other hand, from which it was hewn, it is itself determinate. This conception of the “potentiality” Aristotle distinctly identifies with that of matter, which thus becomes relative in the same sense. If we can find a *δύναμις*, which is so absolutely, *i.e.*, which is not an *ἐνέργεια* relatively to anything more simple, this is the *πρώτη ὕλη*. A box, though made of wood, is not simply wood, but a “form” of wood. It is not wood, but wood-en. The wood again, though formed, to use Aristotle’s language, of constituent elements of earth, is not simply earth, but earth-en. The earth in turn may perhaps be resolved into something else. When in the backward process we come to that which we cannot describe as a form of something else, or as the something else, with the addition *en* (*Græcè en*), then we have a “primary matter,” a potentiality which is merely so, a substance which cannot be a predicate.

The account of the form or essence, then, as a “substance dematerialized,” may be replaced by an account of it as a “potentiality actualized.” The former account was compatible with the supposition, in which indeed it originated, that the form was arrived at by abstraction, that the matter was something positive to be stripped off it, like the coatings from an onion. The “potentiality,”

however, is nothing apart from that which it becomes. Thus the “sensible” is nothing by itself, but determined as Being, *i.e.*, as an object to a thinking subject, it is the primary *δύναμις* of which all knowledge and reality is the gradual actualization. This actualization is not a process of abstraction but of addition. As whatever is predicable of the wood of which the box is made, is predicable also of the boat itself with much more besides, so the process of thought, as a process of thought, as a process from a *δύναμις* to an *ἐνέργεια*, and from this again as *δύναμις* to another *ἐνέργεια*, is one from the less to the more determinate idea, from the minimum of comprehension to the maximum.

An application of this doctrine might have saved the Aristotelian philosophy from the notion, which the scholastic logic derived from it, and which has received its final elaboration in the “quantification of the predicate,” that thought has to do with “wholes of extension.” It is only as such a “whole,” that the universal is opposed to the cause, according to the common saying that the ancient philosophy was a search for universals, while modern science is a search for causes. With Aristotle, as a true follower of Socrates, science is a search for “middle terms,” or definitions. Now it is quite true that according to the theory of “Induction and Syllogism” the *μέσον* is a mean of extension, and though, in the *Posterior Analytics*, Aristotle apparently seeks to adapt the syllogism to a different conception of the mean, it will not really fit any other. The “universals” to which such a theory leads, as predicable only in identical propositions, are no doubt opposed in the strictest sense to the “causes” for which modern science seeks. The *μέσον*, however, is that by which a thing is defined, *i.e.*, according to Aristotle, it is the essence or form of the thing. Whatever elevation, then, the conception of the essence has received by its identification with the *ἐνέργεια*, accrues also to the conception of science as a search for middle terms. In the simplest act of knowledge, a sensation, which is in itself a mere potentiality, becomes actual through being determined as an object to the thinking self. The fact of its being such an object is as yet the only one by which it can be defined. It is its sole condition, or, in Aristotelian language its formal cause. It is also the “mean” by which this one known thing may be connected with others. The mean, however, is not more abstract than the sensation itself, for something can be predicated of it, while nothing can be predicated of the sensation. Our further knowledge of the phenomenon is a progress at once to “forms” more

free from matter, *i. e.*, which we know more about, to more complex "actualities," and to "means" by which it may be connected with a greater number of other phenomena. Each successive conception of it is a "potentiality" relative to that which further knowledge brings, because it involves a smaller sum of conditions. When the full sum of its conditions is arrived at, we have the phenomenon in its most complete actuality, the *tota essentia* or formal cause of it. But we have also the μέσον by which it may be held together in thought with the greatest number of other phenomena, which depend more or less on the same conditions. The sum of the conditions of the phenomenal motion of the sun, for instance, involves the relation of that motion to other celestial appearances. If then the scientific search for the cause of a thing is equivalent to a search for the sum of its conditions, the Aristotelian search for the universal, not as a bare unity, but as an "all-in-one," as a middle-term, which is the most determinate essence because related to the greatest number of other essences—in which accordingly the greatest extension and greatest comprehension meet—follows the same track.

So far as Aristotle maintains himself at the level of this conception, which it must be confessed he does but fitfully, he remedies the fault which Bacon noted in the ancient logic far more philosophically than Bacon himself. The fault was that it flew off at once from the senses to the "axiomata maxime generalia," instead of ascending to them "sensim et gradatim," through the "media axiomata." Of this objection, it is to be noticed, in the first place, that it falsely supposes mere sense to give a basis or starting-point for intellectual progress; and, secondly, that the "axiomata maxime generalia," to which the ancient philosophy flew off, only most general because most empty, were really those nearest the sense as being first arrived at and least determinate. Bacon was still sufficiently under the dominion of scholasticism to regard thought as that process of abstraction of which the goal is the pure attribute of Being, involved in every act of judgment. His objection to the ancient philosophy was that it got to this by a jump instead of "sensim et gradatim." If the office of metaphysic, however, is to unflesh the skeleton on which the accretions of our actual knowledge have been gradually gathered, it is its greatest merit to detach that member first on which the rest of the framework is constructed. If the ancient philosophy, therefore, flew off at once from "sensible things" to pure Being, it did that which every true philosophy must do. Its defect

was that, regarding this Being as a dead element in things instead of as the first "objectification" in which an active principle of thought becomes conscious of itself, it was unable to conceive a process by which this empty form or mere potentiality is actually determined "sensim et gradatim" to a complexity adequate to the fulness of the real world. Thus, when Plato, soaring in the higher region of his philosophy, has carried us to the conception of an ultimate idea, the creative source of beauty, truth, and goodness, the beginning and end of all things, we find no realization of the conception. If we look for a process by which the Divine Spirit, emptied of its fulness, evermore refills the shell of Being, which is Itself as beginning, up to the measure of the intelligible universe, which is Itself as end, we soon find ourselves cheated of our hope, and "drop astounded" to the level of logical abstraction, which takes the determinate world as the beginning of its process, and reaches "pure Being" at the end. When, as in its later Alexandrian stage, Platonism became a religion, this defect in its logic appeared as a limitation on the spiritual life of man. It is not a mere paradox to say that its antagonism to Christianity was the reflex of its metaphysical insufficiency. The philosopher could not accept the idea of a God, who realized himself in the particularities of nature and man's moral life. God, as the *ἰδέα ἰδέων*, was not the negation of all particularity, determined by this negative relation, but the indeterminate residuum which remains after abstraction of all that constitutes the world of experience. From this world, therefore, the soul must dream that it detached itself, if it would attain the "ecstasy" in which alone it could approach him. The same false notion of God's relation to the world, whether conscious or not of its philosophical source, has appeared as Manichæism, asceticism, and under other forms in the religious life of Christendom. In the East it presents itself in the religion of annihilation—Buddhism. It reappears in those of our own day, who, from a metaphysical apprehension, would efface all definite predicates from the language of religion, and reduce it to a prolonged monotonous sigh; who lift their eyes upward, but they know not whither; who are thrilled with an awe, but are forbidden by their philosophy to say of whom. Like the pilgrim who seeks "in Golgotha Him dead who lives in Heaven," they fancy the Divine to be in the grave of a universal, from which all the life of particularity is withdrawn. They do not see that in the relation of their own self to the world of experience—as distinct from it, yet realized in it, as

the unity of the world's manifold—they have the counterpart of God's relation to the world, as determining Himself in it, yet unbounded by the determinations, because in their totality they are Himself. That the counterpart differs from the original, as that which is in process of development from the eternal completeness which it presupposes, is indeed a ground of rational humility, but not of a forced suspense of reason, in the religious approach of man to God.

For the false dualism, which we have noticed, the Aristotelian formulæ go far to provide a substitute. The world of knowledge is a series of forms, each a potentiality and involved in matter on one side, an actuality and clear of matter on the other. Each again is at once individual and universal, a substance generalized by its attributes. The primary form in the series is the simple conception of Being, or the judgment "something is." Every act of conscious sense in a man is the *δυναμὴς* relative to this *ἐνέργεια*, the matter relative to this form. It, on the other hand, is a potentiality or matter relatively to every other object of knowledge. As the thing first known is brought into new relations, it becomes a more determinate form, a more complex actuality, but each such successive judgment is but a gradual qualification of the first. The *πρώτη ἔληξ* of Being, the primary subject, is present when the predicate expresses the most complex universe of attributes as much as when it expresses the simplest. It is the thread on which all hang, for it is the expression of the activity of thought which creates them all. It is the expression of it, however, in its lowest "potency." As, according to the Hegelian dictum, God without the world would be no God, so the "pure thought," of which pure Being is the reflex, as thought about nothing is no thought. Like the abstract idea of Plato, it may be a beginning, but it is a beginning from which, as abstract or taken by itself, nothing can originate. It is only because, just as the principle of life is said to be complete in the least particle of the living body, so the thinking self, the divine subject, is present in the primary judgment "something is," and from it projects an opposite, "something else is," which becomes a determination of the first, that pure Being, instead of being dead matter, is a "principle of motion," instead of mere substance a creative subject. As the man is said to be the series of his acts, so that the first of these contains all in germ, because an outcome of the will of which the whole series is the realization; so the simplest form of the intelligible world, taken not in abstraction but as a determination of a subject, is not a

beginning merely, but a beginning which is potentially the end. For intercourse with such a self-realizing spirit there is no need of "ecstasy," for its realization is the world of our experience, as a series of "forms without matter," i. e., as known in the totality which is its truth, and though distinct from its realization, it is so only as a man is distinct from his acts.

In the latter statements, it must be confessed that we are going far beyond our record as expounders of Aristotle. We are so combining his isolated formulæ as to extract a meaning from them which he did not extract himself. It is just from his failure to recognize the identity of the "Being as Being," which is the object of his "first philosophy," with thought as thought, that his shortcomings arise. He did not clearly see that Being, as the matter or subject (*ὑποκείμενον*) which is involved in all predication, and to which the whole intelligible world is related as attribute, was the indeterminate thinking self, which becomes determinate speculatively in actual knowledge, as it does practically in the moral life. When he speaks of thought (*νόος*) as "potentially all things," he is really placing it in the same relation to the world which is held by substance or Being as the primary matter or ultimate subject. But the identity of the two conceptions is not explicitly noticed by him. His psychology, like his logic, remains to a great extent apart from his metaphysics, and the clearest lights of the one are scarcely ever thrown on the other.

The conception of potentiality and actualization, as correlative, is the basis of the Aristotelian psychology, which anticipates most that is of permanent value in the philosophy of Locke and Berkeley. In his distinction between the objects appropriate to the several senses (*ἰδια αἰσθητά*),—and those given in the intelligent consciousness of all (*κοινὰ αἰσθητά*), he anticipates the secondary and primary qualities of Locke. In maintaining that the "sensible thing" was simply the sensation as actual, he avoided the error which Berkeley had to correct in Locke. Whatever Berkeley, again, had to say on the necessity of a combination of present with the images of past sensations, in order to the apprehension of an outward thing, is anticipated in the Aristotelian theory of imagination (*φαντασία*). Aristotle, however, was quite aware of the distinction between sensation and the intelligent consciousness of a sensation, which Locke practically ignored, and insists that a "unity" must exist in the soul, apart from the several senses, to combine in things the properties which are given by them in mere detach-



ment, and therefore not as properties of a thing at all. On the nature of this unity he expresses himself very vaguely. He does not speak of it explicitly as giving a "thing" of which the *κοινὰ αἰσθητά* are the necessary properties, nor does he distinctly call it thought or reason (*νοῦς*). He saw that every act of judgment, because an act of synthesis, implies the presence of thought, but he did not clearly see that a "synthetical apperception" was involved in the simplest act of intelligent consciousness. Here again his vision was obscured by a false notion of matter. Thought he held to be properly "unmixed with matter," and therefore incapable of affection from without. Sensuous perception, on the other hand, was involved in matter. It implied at once material limits in the objects perceived, and an impression on an organ, which, to be capable of impression, must be material. His way out of the difficulty was to speak of thought as of two kinds, "active" and "passive," related to each other as actuality and potentiality. As it exists in us, it is passive; it is immanent in the affections of our several organs, and realized through them. Properly, however, it is active,—not receptive of impressions, but exclusive of them, and itself creative. This is an explanation which in itself explains nothing. If thought is essentially impassive, to say that there is such a thing as passive thought is simply a re-statement of the difficulty.

Thought is that which is complete in itself, indivisible, absolutely continuous; its action is unaccountable on any other supposition. Matter is the opposite of this. How, then, can thought be present in the reception of impressions, which imply that both agent and patient are material? Such is the Aristotelian difficulty. Now it is clear that our first consciousness, the beginning of our experience, is not in itself a consciousness of an "impression." The impression on a sensitive organ is a mode by which we explain it, and, like every explanation, involves a metaphor; for if the object to be explained were the same as that employed to explain it, there would be no explanation. It is a metaphor taken from an object of which sensation gives no knowledge, for the outward thing, without which there can be no "impression," cannot, as Berkeley showed, be apprehended by sense at all. The metaphor of impression by an outward thing is thus a mode under which we know or think of that which, as supposed to precede all knowledge, cannot in itself be known. It is a mode, moreover, which carries with it its own negation, for an outward thing, as merely outward, could not be a qualifying

element in our consciousness. It is a matter which, in being known, ceases to be a matter; or, as Aristotle expresses it, "it is the form without the matter that is in the soul." When we describe our knowledge, therefore, as dependent on matter, because developed through sensuous impressions, all that we really do is to describe it as beginning with what is actually nothing, as becoming what it is not,—in short, as progressive. The difficulty of conceiving the *νοῦς*, as the immaterial, to be affected by matter in our sensuous experience, is simply the difficulty of conceiving that which is complete in itself as in process of development, or, in Aristotelian language, as a *δύναμις* becoming actual. The general idea must be immanent in the "simple apprehension," or it could not be got out of it, yet the simple apprehension seems to precede it. In the history of our intellectual life, as we look back upon it, our earlier conceptions are only explicable by later ones; they presuppose them, yet in our conscious experience have preceded them. Thus the "passive reason," or reason as developed in us, presupposes an "active reason," as the condition of its development. Yet no less does the "active" presuppose the passive without which it would be force without matter, thought with nothing to think about. The *ἐνέργεια* in abstraction from the *δύναμις* is as unreal as the *δύναμις* in abstraction from the *ἐνέργεια*.

This conception of the ultimate actuality as immanent in every potential stage that precedes it, of the form as in the matter, is as necessary to a theory of animal life as to a theory of reason. Aristotle describes life as the actuality of an organic body, which, as *body*, has life only potentially. Take the body as a collection of separate members, each merely external to the other, and it has no life at all. It is only so far as they are not merely outside each other, but are pervaded by a breath of life, which is not in one to the exclusion of another, that they form a living body at all. So our sensuous expressions, as strictly material or detached from each other, are no potentiality of reason at all. They are only so in virtue of the pervading presence of thought in each; or, in Aristotelian terms, the "passive thought," as merely such, is no potentiality of the "active," but only so far as it is active in every moment of its passivity.

We are here saying for Aristotle, however, what he did not say for himself. The notion that matter was a fixed and absolute element in things, instead of an imperfection in knowledge, evermore removing itself, as it introduces contradictions into his doctrine of the formal essence, so prevents him from



reconciling the opposition between the two aspects of thought. Whether it was himself or an Alexandrian editor that applied to them the formula of the *ἐνέργεια* and *δύναμις*, it is certain that the application is merely suggested, not carried out. The void between them remains unfilled. His highest utterance on the subject is that "thought is a form of forms as sensuous perception is a form of sensible things;" *i. e.*, Thought is the unity to which all objects of knowledge are relative, as our consciousness of outward things is a unity to which those things are relative. The objects of thoughts, he proceeds, are involved in "sensible forms," *i. e.*, in sensible things as known. Such a statement is in itself ambiguous. It may be taken as equivalent either to the "nihil in intellectu quod non prius in sensu," or to the "nihil in sensu quod non prius in intellectu." Neither maxim by itself would adequately express its meaning. Knowledge in its actuality or completeness is, according to Aristotle, essentially prior to knowledge as potentiality or in the making. As conveyed through the senses, it is of the latter kind; and thus the "cogitabilia," though in the sensible things, are prior to them; thus "nihil in sensu quod non prius in intellectu." But in the order of our experience, he says, knowledge through the senses comes first; accordingly, "nihil in intellectu quod non prius in sensu." Yet this is knowledge only so far as the *νοητόν* is in the *αἰσθητόν*. The "form," under which alone we can know the simplest thing as distinct from another, is given by the same unifying and distinguishing self, of which the whole series of forms is the realization. Thus (though this is a result at which Aristotle never clearly arrived himself) the world is not composed of two opposite sets of things, the sensible and intelligible, the material and ideal. There is but one real world, the intelligible, which, however, is an actuality, of which, to us sense is the potentiality. The thought, which pervades it, on its potential side, is "passive," on its actual "creative."

It should follow from this that a knowledge of the divine and eternal is not to be attained by turning away from the world of experience, but by understanding it. The "dualism," however, from which Aristotle only escapes fitfully in his theory of Reason, as developed in us, overmasters him more completely in his theory of Reason as divine. With him, as with Plato, the Divine Reason is related to the world as that which is unmoved itself, but a source of motion is related to that which it moves. When they spoke of the motion of the world, they probably had

before them chiefly the motions which are the object of what, with them, was the highest of sciences—astronomy. The conception, however, admits of a far wider application. Through all the compass of its notes, "till the diapason closes full in man," the world is essentially in process. It is constantly becoming something which in itself it as yet is not. Now, with Aristotle everything that moves is, as such, a potentiality of that which it is not actually. The moving world, therefore, though in each stage an actuality relatively to the stage that preceded, is for the same reason for ever a potentiality in relation to one which is to follow. The end, or "final cause" of its motion is also its source or efficient; for a process of actualization presupposes a complete actuality, which is at once its beginning and its end. Such an actuality in relation to the moving world is God—a source of motion, but immovable himself. He is the eternal living Being, whose life is absolutely continuous, in whom is no variableness nor shadow of turning. As thus complete, He is the absolute good to which the whole creation moves. Such attributes are not to be found in anything material, for all matter must have something outside it which is not itself; nor in the highest forms of human action or production, which all involve a gradual realization of an end not yet attained. They are only to be found in pure "contemplation" (*θεωρία*), in that action of thought where it is its own object; and where, accordingly, it has no void to fill, but is self-contained and its own fulness. In those moments of our own experience, when our whole intellectual self, instead of slowly realizing itself under painful conditions of sense and matter, seems to be before us at once, we have the faint image of the joy of the divine self-sufficiency. We have not here in the slightest degree gone beyond Aristotle's own statements. We seem to have before us the Platonic idea of good, with new formulæ for expressing its activity and relation to the world. At first sight these formulæ seem to be greatly in advance of the Platonic, and to present the Deity as the fulness of the world instead of its emptiness, as immanent in it, yet distinct from it, as a man from his acts. The Divine reason, says Aristotle, moves the world as an object of "intellectual desire." Now, as such desire implies a complete reciprocity between the subject and object of it, this properly conveys the idea that God is in the world, "desiring" his own realization, and that this desire underlies its process of development. This idea, however, if it once appears, is in no way carried out by Aristotle. Having apparently

idealized the world as a series of the "thoughts of God," which we may think after him, and of which each is in necessary relation to, and qualified by all the rest, he cannot sustain himself at this conception, but habitually treats the world as subject to conditions, which have a reality other than as objects of thought, and so cease to form an organic whole, which is the negation of each in particular. Thus limitation in space, instead of being a mode under which things are thought of, and which, when *thought out* effaces itself, is to him a fixed property of the real world, which of necessity excludes from it the indivisible God. So in a region of more practical importance, the moral action of man, as prompted by an unsatisfied desire, which implies something outside of, and as yet unappropriated by the subject, is, according to Aristotle, exclusive of the divine. Here again the externality effaces itself when thought of. However absolute it may seem to the subject of the desire at the time, we know that an object of desire which a man does not take into himself is no such object; that his character makes it what it is to him, while it on the other hand is an element in the formation of his character. The whole moral life is, in fact, a process in which, though it be sometimes like a stream that seems to run backward, man, as an unrealized self, is constantly fusing the skirts of the alien matter that surrounds him, and fashioning the world of his desires to a universe adequate to himself.

To the individual man, no doubt, the absoluteness of his limitations never wholly vanishes. The dream that it can do so is the frenzy of philosophy, and its practical effect may be seen in the immoral heresies of early Christendom, which were mostly crude attempts to realize in action ideas which for us have only a regulative and anticipatory truth. To us who in virtue of our animal properties are limited stages in the world's process, the process cannot be complete in the stages; the whole can never be fully seen in the part. Yet if we were simply thus limited, we could never raise a question about our limitation. We should be as incapable of error as of true knowledge, of sin as of moral perfection, if we could not place ourselves outside our sensations and distinguish ourselves from our desires. As it is, there is that in us which is the negation of each of our acts, yet relative to each of them, and making them what they are. In virtue of this presence, and not otherwise, can we conceive of a God who is in the world but not of it; the "causa immanens" of each stage in its development, yet not interchangeable with

any; realizing himself in its totality, yet prior to it as that without which it would not be a whole at all. If God cannot be described but by negatives, neither can the self within us; and if we can yet gradually come to know ourselves through the acts of which it is the negative, so far may we come to know God through the works which are his, though not himself. If in any true sense man can commune with the spirit within him, in the same he may approach God as one who, according to the highest Christian idea, "liveth in him." Man, however, is slow to recognise the divinity that is within himself, in his relation to the world. He will find the spiritual somewhere, but cannot believe that it is the natural rightly understood. What is under his feet and between his hands is too cheap and trivial to be the mask of eternal beauty. But half aware of the blindness of sense which he confesses, he fancies that it shows him the every-day world, from which he must turn away if he would attain true vision. If a prophet tell him to do some great thing, he will obey. He will draw up "ideal truth" from the deep, or bring it down from heaven, but cannot believe that it is within and around him. Stretching out his hands to an unknown God, he heeds not the God in whom he lives and moves and has his being. He cries for a revelation of Him, yet will not be persuaded that His hiding-place is the intelligible world, and that He is incarnate in the Son of Man, who through the communicated strength of thought is Lord also of that world.

With Aristotle, as the creative reason is at once before and after the development of the passive reason in us, its beginning and its end, so God is at once the "prime-mover" of the world and the end to which it moves. But as the rigid limits of matter, in which, according to him, every act of "passive" thought is bound, prevent him from conceiving of the creative thought as present in its development, so his conception of the world of nature and man's affairs as subject to limitations, not transient, but fixed and final, prevents his thinking of God as immanent in it. God with him, as *χωριστός*, is not merely distinct from the world, but virtually out of relation to it; not the perfect actuality of which the world is the *δύναμις*, but an aetnality absolutely *ἀνευ δυνάμεως*. His own conception of substance might have shown him a more excellent way, for substance, as we have seen, is *χωριστός*, as individual and separate from all things else, yet known through relations which are the negative of this mere individuality. This conception, however, he never works

out. God with him is a mere "first cause," not a "causa immanens," and it inevitably follows, if the divine presence is not found in each link of the chain of "secondary causes," that it is worth little when found at their ever-receding end. He dwells apart, "thinking on thought," contemplating "necessary matter," and our world, as "contingent," is excluded from his regard.

It is in this unfused antithesis of the "necessary" and the "contingent" that the Aristotelian dualism is most conspicuous. Like the "world of opinion" and the "world of true knowledge" with Plato, the "necessary" and the "contingent" with Aristotle are opposed not as the perfectly and imperfectly known, but as distinct sets of things. In his own language, everything "that has matter" is contingent. Taking matter in the sense which we have shown may be elicited from Aristotle himself, as the unknown, no statement could be truer. Our conception of that of which the relations are only partially known, must constantly vary with the discovery of new ones. Thus, "physical necessity" is never absolute, not, however, because it is doubtful whether what happens now—for instance, the phenomenon of sunrise—will continue to happen, but because we can never know exactly what it is that happens now, since it may depend on conditions which cannot be fully ascertained. Mathematical necessity is only more absolute because it makes hypothetical abstraction of certain conditions which are fully known. The straight line, for instance, can be fully known, because it is the abstraction of that property of limitation in space without which there can be no knowledge of things as outward at all. Of every new case with which the geometrician deals the conditions can be fully known, because constructed by himself. Once let the conditions of a physical phenomenon be known with the same completeness, which in the nature of the case they cannot be by us, and it in like manner becomes necessary with the necessity of thought. That there is a necessary connexion in nature, if once it can be discovered, all science supposes. But for such a supposition it would never have opposed the "propter hoc" to the "post hoc." It would still be pursuing the *ἐπαγωγή διὰ πάντων*, still endeavouring to show that, because A always has followed the complete phenomenon B, it probably always will, instead of to ascertain by elaborate analysis of B what it is in it with which A is in a single instance connected.

According to Aristotle, however, who regarded matter (except in his better mo-

ments) as a fixed property in things, in virtue of which everything has a world outside itself, and may become that which it is not, nature and human life, moral as well as animal, being essentially "in matter," are essentially "contingent." "Pure thought," on the other hand, as self-contained, has nothing outside it. It is its own object, and its object is therefore "necessary." If the question is raised, however, *What* such an object is? an answer is from the Aristotelian point of view impossible, for all things that we know, as incomplete, and therefore, according to him, "contingent matter," are excluded. He endeavours, indeed, sometimes to find an adequate object in the exact sciences. Now, the exactness of a science, according to his own statement, is in exact proportion to the simplicity of its elements. Arithmetic, he says, is more exact than geometry, because it assumes a single element, the monad, while geometry assumes a double one, "the monad *having position*." Thus the highest thought with Aristotle—the thought of God, and of the philosopher in his moments of divine abstraction—is either thought about nothing, or thought about the barest and emptiest of sciences. We are here again on the track which leads to a "religion of annihilation."

This may seem a strange result to follow logically from the doctrine of the "most practical of philosophers," and, as we have seen, it is only the result of a dilemma in his philosophy, the way of escape from which he himself indicated, but did not pursue. The development of civil life in Greece prevented it from taking practical effect there as it did in the east, but we may observe its operation in Aristotle's exaltation of the "contemplative" above the "practical" life, the fitting accompaniment of the contemporary political decadence. The ground of this exaltation is, that while in moral action the subject has always something outside itself, to which the action is related as a process of appropriation, in contemplation the subject is self-contained. Its action is consequently continuous, while that of the moral life is ever failing for weariness. Pleasure is the reflex of activity. Thus, while the pleasure which accompanies contemplation is continuous, that of moral action implies a previous and a sequent pain. One is "forever panting and forever young;" the other

"Leaves the heart high, sorrowful, and cloy'd,  
The burning forehead, and the parched tongue."

Now, if with Aristotle the object of the philosopher's contemplation were the world as a manifestation of spirit, and thus "an-

other himself," there would be truth in this view. It would express that anticipatory assimilation of the world as spiritual which is the privilege of the philosopher, and which he shares with the poet and the saint. As the poet traversing the world of sense, which hespiritualizes by the aid of forms of beauty, finds himself ever at home, yet never in the same place, so the philosopher, while he ascends the courts of the intelligible world, is conscious of a presence which is always his own, yet always fresh, always lightened with the smile of a divine and eternal youth. Everything is new to him, yet nothing strange. The results of art and science, of religion and law, are all to him "workings of one mind, features of the same face;" yet are the workings and the features infinite. No longer a servant, but a son, he rules as over his own house. In it he moves freely and with that confidence which comes of freedom. Such freedom and confidence, indeed, if divorced, as the Aristotelian doctrine divorced them, from the moral life, become a ridiculous conceit, fit for "the budge doctors of the Stoic fur," and are justly met with the reminder that

"There was never yet philosopher  
Who could endure the toothache patiently,  
How'er he may have writ the style of Gods,  
And made a push at chance and sufferance."

In their proper correlation to the moral life, however, as giving fruition beforehand of that of which the moral life is the gradual realization, they have the weakness, indeed, which belongs to all ideas not actualized, to all forms not filled up; yet are they not like faith without works, dead, but like faith as the Christian knows it, a permanent source of unhesitating activity.

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ART. V.—1. *Sermons of English Divines.*  
v. x.

2. *Mediæval Preachers.* By the Rev. J. MASON NEALE. 1856.

3. *Post-Mediæval Preachers.* By S. BARRING-GOULD, M.A., Rivingtons, 1865.

THE English, since the Reformation, take it for all in all, may be called emphatically a "sermon-loving" people. We say this in the full hearing of the loud and impatient outcry that is constantly rising from our intelligent coteries and from our public press in denunciation of the dulness of Sunday discourses; in face of the stupendous manufacture of platitudes which Dean Ramsay's

estimate of our four million annual homilies has statistically made evident. We complain of sermons, but, on the whole, we, the public generally and collectively, like them, and have always liked them, since we were a Protestant community. Our library shelves and our publishers' circulars, and the assertion of that cautious literary historian Hallam, prove the fact one way; our crowded churches and our constant church-building go far to prove it the other way; for though it is true that to go to church at all involves the necessity of hearing a sermon, as our present church services are constituted, and even those who dislike the preaching might not be prepared to give up the prayers, yet we doubt whether a remedy might not be found if the grumblers were not after all half-hearted in their complaints, or if the proportion of those who go in very great measure for the sermon's sake, were not the most considerable in almost every congregation. Why it is, — when we know so well, as soon as we hear the text, all the points that a preacher is going to bring before us, — when we can turn to so many volumes of printed discourses far better, in all probability, than the one we are going to hear, — why it is that we should not only tolerate, but on the whole desire, the weekly homily delivered in its *viva voce* form, — it might be difficult to explain; but so it is, although unquestionably the thoughtful bearers of our day no longer find the sermon the stimulating food it used to be, when the attention of the highest intellects in the land was concentrated on sectarian strife and dogmas, and when every echo of the strife was suggestive; and, although, no doubt, its real stronghold is to be found among that respectable but *borné* "middle class," whose mingled credulity and intolerance — with all respect for their better qualities — is really, we must fear, one of the causes which keeps down the calibre of the modern sermon to an inferior range of intelligence and reflection.

To the modern complaints, and to their possible remedies, we shall find occasion presently to advert. Our object at the outset of our article is to trace the rise of the venerable "institution" which still, with more or less of dignity, retains its footing among us, and then to indicate some of the types and fashions it has at different times assumed.

It is to the combination of customary respect with living interest and desire, that the British Protestant sermon owes the important position it has occupied from generation to generation in the national existence. The Church of the Reformation is not, like the Church of Rome, a body complete in itself,

crystallized into a form of polity and dogma which marks it off distinctly from the world, and subjects its utterances, doctrinal and practical, exclusively to its own traditions. The Church of the Reformation, on whatever grounds its members may please themselves with asserting the authority of their governing body to rest, is bound up as polity with the State, and as a society with the world around it. Hence it has always felt the influences which the State and society for the time being have experienced; and the salient features, moral and intellectual, of each successive period of the busy history of our land, will to the curious inquirer be found faithfully reflected in contemporary ecclesiastical teaching. Nay more, we may invert the order of observation, and look first to the mirror for the image that stands before it; verifying for ourselves the remark of Coleridge, that "the tone, the matter, the anticipated sympathies in the sermons of an age, form the best criterion of the character of that age."

Now, in proposing for our consideration the history of sermons, it is necessary to distinguish. It is to the ordinary congregational discourse that we mean to confine our remarks. Academical sermons, or set disquisitions like those of the Bampton Lectures and the Boyle Lectures, learned theses thrown into sermon form, these are not the kind of exertions that come under our review. We wish to draw attention to the moral and spiritual parenesis which the English Protestant nation has received from the mouth of its professional ministers from age to age, directing our eyes mainly on the Established Church, but taking also into our account some of the side influences which have contributed to form the style and temper of its pulpit oratory.

As a study of human nature — of the teachers and the taught — the history of sermons has a philosophic interest of its own, apart from its directly religious aspects. It is curious to see laid bare before us the inner motives that mould men's minds under different conditions of Christian society and civilization, the kind of religious appeals to which, at different times, they are most responsive, the touches of human nature which make all generations akin, the temporary fancies with which they blend their faith; then to observe how the speaker's intellectual bias modifies and colours his views of truth divine; how the same fundamental doctrines may be vivified or crystallized by individual character. Hortatory theology has this peculiar to itself: that its flights are confined to a fixed platform of first principles, while men and manners change, and

secular knowledge increases its borders; yet, so intimate are its relations with the processes of the human heart, that, according to the claims of Christian instruction, every variation of thought and feeling may be brought within its compass, every altered circumstance of the world's history provided for in its range of contemplation and monition.

If we look back, then, over the field of sermon literature, we shall find the occasions of their greatest notability in English life to have been either—(1.) When they aspired to shape the intellectual and practical conclusions of men through the medium of dogmatic controversy; or (2.) when they attracted the contemplative intellect by the beauties of style or the philosophy of doctrine; or (3.) when they stimulated the conscience by the appeal to personal unction. (4.) They have also occupied a prominent place in the national life when they have addressed themselves to the calmer influences of common sense and every-day morality. And, lastly, we may perhaps throw into a fifth department, those "sensational" effects, which have given some preachers a transient popularity, not connected with any special movement of the public mind.

In each of the above conditions of influence, a certain receptivity in contemporary taste is to be pre-supposed. When the preacher fails to recognise this, his influence is at an end. If the will to hear continues to exist in one class of the community, and has ceased in another, then to the one class will his influence be limited; to the other he will seem a weariness or an anachronism. Controversial sermons will scarcely stir an audience, except when the controversy is of some point in anxious debate at the time. The topics of "fixed fate, free-will, foreknowledge absolute," could one of the "heated pulpiteers" of Cromwell's army come to life at the present day, would scarcely quicken the pulse of that same English race, to which at one time they were as swords and firebrands. Poetical and imaginative discourses must be nicely adjusted to the canons of literary taste prevalent among those who listen to them; a two hours' harangue from Jeremy Taylor might possibly, in our modern impatience of pedantry, make even Lord Houghton or Mr. Tennyson yawn. Sermons of spiritual unction, to be more than transitory in their influence, must lose half the elements which, perhaps, rendered them stimulating to their original audience; they must be free from party cant and the shibboleths of sectarianism. Neither Whitefield nor Simeon would be welcome at the present day to most hearers of the same

class and calibre, whom, in their own time, they transported to heights of unwonted enthusiasm. The "sensational" sermon will always depend peculiarly on whimsical and temporary effects, though the ready resources of tact, or some happy appositeness of allusion, will often enable the student of past times to appreciate the success it has achieved. And the sermon of quiet common sense will exhibit little more than dull truisms to a generation which has learnt to contemplate the first foundations of its belief under altered measures of the probable and the beneficial.

May not this varying demand of the times indeed be often reflected in the taste and experience of the individual Christian? Are not we ourselves conscious of altered appreciation in respect of sermons which we once heard or read with interest and delight, and this not because our own character has changed, not because we are personally more or less spiritual, more or less poetical, more or less rational than we were, but simply because there is an unquestionable flavour of staleness, of inappropriateness, of non-correspondence to the reality of things as they now appear to us, in a large proportion of the views and assumptions which formerly we accepted without misgiving? "*N'est il pas douloureux,*" says a French author, "of the present day, adverting to the changes in French pietistic taste, *de voir combien les expressions de nos sentimens deviennent rapidement une sorte de matière archéologique?*" \*

We should look then upon sermons as the natural productions of this garden of the English Church, all good for nourishment in time and season, but some for this season and some for that. The herb that tasted fresh and good in early spring has lost its savour by midsummer; the summer salad would not please the appetite of winter. Yet some vegetables, of less succulent or less pungent quality, may preserve their nutritive qualities at all times, and for all varieties of table garniture.

Meanwhile, to vary the metaphor, we must devote a little space to a description of the first grafting and training of that vigorous plant, the English sermon, as it has been known among us since the establishment of the Church on its Protestant basis. It was grafted on a wild olive-tree, whose life and nourishment had run to waste through the negligence of an ignorant priesthood. Immediately before the great convulsion of the

sixteenth century, Christendom at large was at a singularly low ebb as to the quality of its pastoral instruction. If ever revolution was justified by the inadequacy of an institution to fulfil its legitimate purposes, the justification of the Reformation was to be found in the negligence as to all matters of popular edification which characterized the Church at the period in question. We need no Luthers and Cranmers to teach us this. The Church herself confessed it, in the attempts of her own more earnest sons to reform her from within; and in the energy to which she was impelled when the defection of province after province from her empire began to make her tremble for her supremacy, and even her existence. The political history of the middle ages, is, as we well know, in great measure made up of the records of the worldly ambition to which popes and prelates were incited by their position; and it is more evident, the more insight we obtain into the under-currents of those times, how much professional carelessness, and a reckless love of turbulence and meddling in State affairs, were the attributes of the inferior clergy, both regular and secular. The people were, for the most part, in the condition of children—ready to follow the guidance of their spiritual pastors, whether in apathy or revolt. There is seldom a record of any wide-spread sedition in the middle ages of which some popular ecclesiastic is not found to have been the organizer or the mouthpiece; but the normal condition of the masses, despite their occasional refractoriness, was submission to constituted authorities rather than resistance; and it is to the ordinary ministrations of the shepherd of the flock that we must look for samples of the Church's agency in guiding the footsteps of her children along the daily walks of life and duty.

Of all the nations of Europe before the Reformation, England was perhaps the one in which the parochial instruction was most nugatory and feeble. There seem to have been no preachers who attained even the questionable celebrity of the Menots and Maillards of the French pulpit, or the more serious title to respect of Tauler or Geiler in that of Germany. Probably the most earnest instructors were to be found among the Lollards, but in their homely elucidations of Scripture they do not seem, for the most part, to have aimed at oratorical effect. Bishop Pecock, who, if not himself one of the sect, was favourably inclined towards it, speaks of the ordinary run of friars as "pulpit-hawlers," who "split the ears" of their auditors by their noisy encomiums of their saints. Some able and sensible shepherds

\* Emile Montégut, *Revue des Deux Mondes*, Avril 1866.



of the flock there were even then, however, mingled with the careless and corrupt; and we happen to have in our language two remarkable specimens of pulpit addresses which may serve to show the better and worse style of instruction current among our ancestors in the days of the Plantagenets. The first is registered in that most curious repertory of old English domestic life, on which Mr. Merrivale's ingenious literary scepticism has lately failed to throw discredit, the Paston Letters. It is the Whitsunday sermon of Friar Brackley, preached in the Friars Minors' Church at Norwich; and, divested of the uncouthness and occasional obscurity in which it is couched, its purport, it must be confessed, appears highly creditable to the preacher's judgment and piety. He first recommends the example of the apostles as a guide to those who have to minister the Word of God, in the three capital points of knowledge, energy or unction, and command of diction; or, to use his own terms, in "cunning, boldness, and languages." What apter summary of a preacher's duties could even now be given? Then follows an injunction to seek God's help not only by the prayer of the lips, but also by the prayer of good deeds. Then, a description of the three different kinds or degrees of joy which man may look for:—The one void, the joy of the world—"but this joy is not perfect; but this joy is not stable, but it is mutable as a shadow; for he that thus joyeth in the beauty of his wife, it may fortune to-morrow he shall follow her to church upon a bier" (a touch of Jeremy Taylor in this). The second joy, "half-full;" the joy of ghostly grace dashed by the thoughts of purgatorial penance (at least this is the best sense we can put upon the passage). The third, and only "full" joy—"everlasting bliss." The discourse, a short one as recorded, is interlarded with Latin texts, and betokens devout scriptural study on the part of the speaker.

The second sermon—whose text has been preserved to us among the Harleian mss.—is no doubt a more characteristic specimen of the ordinary pulpit lore of the times. To be sure, Friar Brackley preached to friars like himself, men whose business was to teach. The other sermonizer was administering spiritual instruction to an ignorant congregation; and we see in the superstitious details of symbolic ceremonies, and the fantastic application of legendary inventions to the verities of Christianity, in what the favourite notions of spiritual edification for the masses in those days consisted.

The curious inquirer may find the sermon in question in the second volume of the *Pic-*

*torial History of England*. For our present purpose we will quote the legend:—

"There was sometime a knight came from far countries and would seek adventures. So he hastened to a forest, where he heard a great noise of a beast crying. So this knight drew nigh, and then he saw how an adder had caught a lion and poisoned him, and bound the lion to a tree while he lay and slept. When the lion waked of his sleep, and perceived himself bound, and might not help himself, he made an horrible cry. Then the knight had compassion on the lion, and saw that the king of beasts was in distress. He drew out his sword and slew the adder and loosed the lion. And when the lion found himself unbound he fell down to the knight's feet, and ever after he served the knight, and every night lay at his bed's feet; in tournaments and battles ever helped the knight, inasmuch that all men spake of the knight and the lion. By this knight is understood Christ Jesus, second person in the Trinity, that came from far country,—that is to say, from heaven into the vale of this troubled world," etc.

In this fashion of telling stories or apoloques from the pulpit, we may doubtless trace a connexion with the other source of instruction whence people in the middle ages were taught to derive their knowledge of faith and morals. The dramatic representations at the time, as is well known, consisted entirely of "Mystery" and "Morality" plays—often acted in churches, where it was deemed no discredit to mix up antic buffoonery with subjects of the most awful import. If the buffoon could be a preacher, why should not the preacher be a buffoon? The people were children, who loved to be told stories better than to reason. In fact, they had little notion of what reasoning was, and the medicine that was to do them good must be cloyed with sweetness at the edge of the jar. And thus it came to pass that, aiming at no higher standard, the preacher was glad to help out his text with superstitious gossip, which saved him the trouble of more laboured oratory. Says Palinode to Piers in Spencer's pastoral:—

"Now, I pray thee, let me thy tale borowe  
For our Sir John, to say to-morrow  
At the kerke when it is holiday;  
For well he meanes, but little can say."\*

When Protestantism had spread over the land, then "old wives' tales" were ridiculed and reviled without mercy. Still true it is, that we shall scarcely find a more eminent instance of the practice than in the Protestant Bishop Latimer, whose sermons, although in their main purport they are a vigorous

\* *Shepherd's Calendar*, Ecl. v.



protest in opposition to Romish abuses, and in behalf of a purer doctrine, are, as to their style and method, a relic of the teaching to which he had himself been accustomed, and to which the capacity of his auditors had been trained. Infinitely more shrewd and forcible than the Popish priests his contemporaries, Latimer nevertheless shared to the full their propensity for homely illustration and anecdote. He offers us the strangest conceivable medley of fervour and grotesque fun—of commonsense gossip and telling satire. He was the Rowland Hill of the Reformation pulpit. But it was rather to the improvement of morals than to the refutation of abstract doctrinal error that he applied his religious teaching; and his stories, always attractive from their quaintness and mother-wit, have a special interest for us now, from the characteristic touches they afford of the real life, as he saw it, of Court and Country. The merry monk of Cambridge, who would fain have read the sentence "*Nil melius quam letari et facere bene*" without the *bene*; "A vengeance of that *bene*; I would *bene* were out," quoth the merry monk; "for it importeth many things, to live well, to discharge the cure;" the Captain of Calais, whose fabled betrayal of his trust is taken as an image of the fall of man in Adam; the well-known *non sequitur* of Tenterden Steeple and Goodwin Sands; the apologue of Lady Faith and her gentleman-usher Knowledge;—all these are products of the mediæval style of professional oratory, mixed with the vigorous sense of a Reformer of the sixteenth century.

But the necessities of the great crisis which Latimer's days witnessed brought about altered conditions in the style and character of pulpit instruction. In that momentous convulsion which severed the English Establishment from its parent stem, one of the most urgent tasks devolving on the regenerators of religious life in the realm was to educate the mass of the people to the new views of faith and duty. Now, if we for a moment consider what power the prejudices of an ignorant multitude always possess, how difficult they are to eradicate even in our own days, how much more difficult this must have been in an age when neither schools nor printing-presses had any comparable part of the range of influence they now occupy, when the remote nooks and corners of England were for all purposes of intercourse far more effectually cut off from each other than London and Madrid are now, we may in some measure estimate the magnitude of the work to be undertaken. There was obviously but one engine that

could be immediately efficacious, and that was the pulpit. Every Sunday the population of England's ten thousand parishes would, in greater or smaller proportion, assemble together in their respective local centres, the parish churches; there to meet face to face a minister who was bound to adhere to the established law of creed and church-communion. To utilize this source of spiritual influence was of paramount importance; and the energies of prelates and statesmen were unceasingly employed with the problem. In the Popish times preaching had become more and more neglected in the country parishes. Non-residents spent their time at Court or college, and went down once a year, in the summer season, to visit and harangue their flocks—"Strawberry preachers," as they were called; for they came with the strawberries, it was said, and departed as soon. The resident priests were scarcely less ignorant than their people; additional masses had usurped the place of *viva voce* instruction. A few panegyrics of the saints on holidays, stuffed with tales, and the extempore exhortations of the friars who went round in Lent and preached up penance and indulgences, constituted the sum of what the "hungry sheep" had given them for nourishment. "If a priest should have left mass undone on a Sunday within these ten years," says Latimer, "all England should have wondered at it; but they might have left off sermons twenty Sundays and never been blamed." Nay, so had these "unpreaching prelates," as Latimer styles the clergy of his early days, neglected the only part of their duty which required serious mental effort on their part, that churches might frequently have been found destitute of a pulpit altogether.

Now, while it was necessary to keep up the clergy supply in every parish where the Popish priest had hitherto sung his masses, it is obvious that to train a learned clergy could not be the work of a day. Ignorant men, and fanatical men, might do more mischief than good by their readiness to talk—to be "pulpety'd," as Sir Thomas Moore expressed it. It was often indispensable to put into the mouths of the people's instructors the lessons they were to teach their flocks. And therefore the Book of Homilies was compiled, as a storehouse of plain instruction to which all could resort. Preachers of a more learned stamp, on the other hand, were trained and licensed specially to go through the land as missionaries. Such were the six chaplains-ordinary of Edward VI., of whom two were in turn to be in attendance on the King, while the rest, two by two, carried on the work of evangelization

in the different counties. And here it is that we must look for the real origin of the English pulpit style of the Reformation, to which we shall presently advert. One measure which the excitement and ignorance of the times seemed to render necessary, was the introduction, for the first time at this period, of *written* sermons. This appears to have been partly intended as a corrective to the habit of senseless twaddle into which preaching had degenerated under the old system, and partly as a check to any doctrinal extravagances on the part of the preacher, who could be "brought to book" at once on a complaint from his auditors. It was not without its drawbacks as a mode of address. Good elocution was doubtless a rare gift among the the average parish parsons of the time, and Latimer complains of the way in which bad readers "hawked and chopped" their sermons or homilies, till it were as good for the congregation to be without them.

We have already remarked that Latimer's sermons belong, as to their literary character, rather to the age that was passing, than to that upon which the Reformation was setting its impress. The fashion of oratory which properly owes its introduction to the Reformation, is that which we find exemplified in the sermons of such as Ridley, Hooper, Bradford, Sandys. It was not an ornate or an eloquent style. Its chief characteristic was that it was intensely business-like. The preachers were men mighty in the knowledge of the newly-translated Bible. With pregnant texts and weighty inferences they struck at the root of the hostile superstitions. Blow upon blow, wedge upon wedge, they argued the matter in hand with no thought but how to prove that their views were founded in sense and Scripture. Their sermons are those of men who have a definite message to deliver, a living doctrine to inculcate on living men. The old childish digressions that passed for reasoning when the Mass-Johns and vagabond friars beat the desk, were now superseded by a manly logic, not so well-drilled, indeed, as the logic of our own days, but still a logic, with a purpose and a bearing. The appreciation of argument, as such, made a stride between the days of Henry VII. and Mary, which is without doubt one of the most striking *notabilia* of that age of mental advance. The Romanist was driven to argue in his turn, but his theses were more for the consistory than the congregation. When he addressed the people at large, it was with the voice of authority, and from the assumed vantage-post of infallibility. To admit that the members of a miscellaneous audience

were fit judges in the arena of theological polemics, would have been half surrendering at the outset the fortress of his creed.

By degrees, of course, this oratory of the Reformation lost its novelty, and to a degree its impressiveness, in the months of those who considered themselves bound to keep within the clearly defined limits of the Church's positive teaching. The Puritans kept up its force by their doctrinal enlargements and divisions, but they were inconveniently free-spoken both on religious and political themes, and were discouraged in every possible way by the ruling powers. We read in their records of the "awakening preachers," the "thundering preachers," the "pious and painful preachers," of Elizabeth's and James's days; but they had a hard time of it, what with the arbitrariness of the sovereigns, and the fears and jealousies of the prelates. When the course of events brought their party to power, the natural separation occurred between the higher and more temperate minds, and the more vulgar and extravagant. There were many divines of first-rate learning in the Puritan ranks; and in their most eminent orators of a later day, in Owen and Howe, Baxter and Calamy, we find the mind of the Marian martyrs reproduced, their topics only varied by more theological hairsplitting or more self-dissecting "experience."

Within the non-puritanic section of the Church of England, on the other hand, secular learning and rhetorical taste began to assert her claims over the arid field of controversy. Hooker, the venerable and judicious, marks, if we mistake not, the turning-point, when the drier type of Protestant eloquence merged into the philosophical and ornate.\* The generation that grew up under the Virgin Queen was, we know, peculiarly susceptible to the influences of taste and imagination. Hooker himself was no unworthy contemporary of Shakspeare and Bacon, and was the man of all others to bring sacred oratory into harmony with the more fastidious requirements of the time. To his auditors at the Temple he might be heard enlarging on the doctrines of justification and grace, with the severe technicality of his predecessors indeed, but with a nobleness and majesty of diction to which they had never laid claim. Fuller's well-known description of the contrast between his method and bearing in the pulpit at the Tem-

\* The sermons of the Rev. Henry Smith, Lecturer of St. Clement Danes, which have just been reprinted (W. Tegg, London, 1866), serve to show that rhetorical beauty of a high order might have been heard also from the Puritan pulpit at this time. Smith's life ran exactly parallel to that of Hooker.

ple church, and that of Travers, the Puritan divine, who succeeded to the same pulpit in the afternoon, is curious as giving us a notion of the outward style adopted by the partisans of "High Church" and "Low Church" opinions respectively in Elizabeth's reign. How often has it been re-enacted since! Might not the ascetic Pusey and the persuasive Villiers have exhibited very much the same species of contrast within our memory? \*

And now it was when, the immediate excitement of warfare being over, the Episcopal Church had to realize her position as an "isthmus of a middle state" between Romanist and Puritan extremes. The power of reaction began to make itself felt; and a rapidly increasing dislike to the Puritan views threw back the most influential Anglican divines upon the neglected storehouses of doctrine and sentiment to be found in the writings of the early Fathers. It is here that we have, properly speaking, the formation of the High Church party in the Anglican Establishment. Donne, Hall, Andrews, were its most eloquent exponents in the pulpit during the earlier stage of its development; Taylor, Barrow, and South during its latter stage—its latter stage, that is, previous to the Revolution; for, under new conditions, it was destined to revive again, as we all know, in our own times; and its principles are still active among us.

The sacred eloquence of James I.'s reign has no worthier representative than Donne, the learned Dean of St. Paul's. Take him for all in all, Donne was unquestionably a

very remarkable man. Possessing, as he did, gifts of thought and expression which seem nothing short of the heritage of genius, why is it, we ask, while reading his works, that he did not achieve a place in the conspicuous ranks of genius? He had not the gift of judgment; in other words, of that tact or taste which instinctively guides true genius in its manifestations, and is in fact one of its essential constituents. His depth of thought and energy of diction take us by surprise at times, both in his verses and his sermons; and we feel that he is no unworthy co-mate of the giants who walked the world of literature in those days. But the effect is never continuous. The same poem or sermon which shows his greatest beauties will also glare with his most patent faults, and these are scholastic subtleties, wiredrawn comparisons, fantastic conceits, punning allusions, and, in his sermons, that want of perspective which we so often observe in the divinity of the Stuart era, exhibiting itself in an utter confusion of measure between things great and small; long ratiocinations based on ill-founded hypotheses; elaborate illustrations of far-fetched presumptions. We so greatly admire Donne, in spite of all the faults of his composition, that we feel impelled to give some passages from his now little-read sermons, and, to give them full effect, would fain call up to our readers the image of the preacher's presence—pale, ascetic, rapt; "weeping sometimes for his auditory," says Isaac Walton, "sometimes *with* them; always preaching to himself, like an angel from a cloud, but in none." One of his admirers said of him, with a touch of the fashionable hyperbole of the day—

"Corrupted Nature sorrowed that she stood  
So near the danger of becoming good;  
And when he preached, she wished her ears  
exempt  
From Piety, that had such power to tempt."

Thus he enlarges on the name and office of the Saviour of mankind:—

"We find this name of Saviour attributed to other men in the Scriptures than to Christ. In particular distresses, when God raised up men to deliver His people sometimes, those men were so called Saviours; and so St. Jerome interprets those words of the prophet, *Ascendent salvatores*, 'Saviours shall come up on Mount Zion' (Obad. 21), of prophets and preachers, and such other instruments as God should raise for the salvation of souls. Those whom, in other places, he calls *Angels of the Church*, here he calls by that higher name, *Saviours*. But such a Saviour as is proclaimed to the ends of the world, to all the world—a Saviour in the mountains, in the height of presumptuous sins, and a Saviour in the valleys, in the dejection of

\* We will cite this description in a note for those who may not immediately recall it:—

"Mr. Hooker his voice was low, stature little, gesture none at all, standing stone-still in the pulpit, as if the posture of his body were the emblem of his mind, unmoving in his opinions. Where his eye was left fixed at the beginning, it was found fixed at the end of his sermon; in a word, the doctrine he delivered had nothing but itself to garnish it. His style was long and pithy, driving on a whole flock of several clauses before he came to the close of a sentence. So that when the copiousness of his style met not with proportionable capacity in his auditors, it was unjustly censured for perplex, tedious, and obscure. His sermons followed the inclination of his studies, and were for the most part on controversies and deep points of school divinity.

"Mr. Travers his utterance was graceful, gesture plausible, matter profitable, method plain, and his style carried in it *indolem pietatis*—a *genius of grace* flowing from his sanctified heart. Some say that the congregation in the Temple ebbed in the forenoon and flowed in the afternoon, and that the auditory of Mr. Travers was far the more numerous,—the first occasion of emulation between them. But such as knew Mr. Hooker knew him to be too wise to take exception at such trifles, the rather because the most judicious is always the least part in all auditories."—*Church History*, Book ix. sect. vii.

inordinate melancholy too; a Saviour of the east, of rising and growing men, and a Saviour of the west, of withering, declining, and languishing fortunes too; a Saviour in the state of nature, by having infused the knowledge of Himself into some men then, before the light and help of the law was afforded to the world; a Saviour in the state of the law, by having made to some men then, even types accomplishments, and prophecies histories, and, as Himself *calls things that are not as though they were*, so He made those men see things that were not as though they were (for so *Abraham saw his day and rejoiced*); a Saviour in the state of the gospel, and so as that He saves some for the fundamental gospel's sake,—that is, for standing fast in the fundamental articles thereof, though they may have been darkened with some ignorances, or may have strayed into some errors in some circumstantial points; a Saviour of all the world, of all the conditions in the world, of all times through the world, of all places of the world: such a Saviour is no man called but Christ Jesus only.”\*

Once more, hear his appeal to the atheist—*petitio principii* in point of reasoning, but a magnificent one:—

“Poor intricated soul! riddling, perplexed, labyrinthical soul! Thou couldst not say that thou believest not in God if there were no God; thou couldst not believe in God if there were no God. If there were no God, thou couldst not speak, thou couldst not think, not a word, not a thought, no, not against God: thou couldst not blaspheme the name of God; thou couldst not swear if there were no God; for all thy faculties, however depraved and perverted by thee, are from Him; and except thou canst seriously believe that thou art nothing, thou canst not believe that there is no God. If I should ask thee at a tragedy, where thou shouldst see him that had drawn blood lie weltering and surrounded in his own blood, Is there a God now? If thou couldst answer me, No, these are but inventions and representations of men; and I believe a God never the more for this. If I should ask thee at a sermon, where thou shouldst hear the judgments of God formally denounced and executed, re-denounced and applied to present occasions, Is there a God now? If thou couldst answer me, No, these are but inventions of state, to supple and regulate congregations, and I believe a God never the more for this:—be as confident as thou canst in company—for company is the atheist's sanctuary—I respite thee not till the day of judgment, when I may see thee upon thy knees, upon thy face, begging the hills that they would fall down and cover thee from the fierce wrath of God, to ask thee then, Is there a God now? I respite thee not till the day of thine own death, when thou shalt have evidence enough that there is a God, though no other evidence but to find a devil; and evidence enough that there is a heaven, though no other evidence but to feel hell,—to ask thee then, Is there a God

now? I respite thee but a few hours, but six hours, but till midnight. Wake, then; and then, dark and alone, hear God ask thee then—remember that I ask thee now—Is there a God? and if thou darest, say No!”\*

It will be manifest that the difference between such oratory as Donne's and that of the early Reformers consists in the greater ornament and contemplative enlargement of the later type, and also in its inferior *business-like* qualities. Donne does not strike at the morals of his age with the uncompromising bluntness of his predecessors. He sets sin in a sinister light, and by a thousand similes points out its inevitable consequences; and in like manner he pours floods of noble rhetoric over the topics of holiness and heavenly life. But all this he does as a philosopher and poet, and his accessories and parentheses, while they frequently enhance the beauty, do unquestionably detract from the practical force of his discourses. What must have been the capacity for sustained attention in the crowded audiences which could listen for two hours long to these most elaborate harangues? It was the taste of the time. Religious topics were still matter of intense curiosity in those days, when they had but lately been

\* Donne's *Sermons*, ii. 354. One train of thought which occurs in the sermons of Donne, and occurs more than once, is interesting as affording presumption that he studied and knew how to make use of, that wonderful epitome of human nature, Shakspeare's Hamlet, then only recently given to the world. Compare the following passages, from a sermon preached in 1621, with the well-known speeches in the gravedigging scene. Hamlet was written probably about the year 1600:—

“The dust of great persons' graves is speechless too; it says nothing, it distinguishes nothing. As soon as the dust of a wretch whom thou wouldest not, as of a prince whom thou couldst not, look upon, will trouble thine eyes if the wind blow it thither; and when a whirlwind has blown the dust of the churchyard into the church, and the man sweeps out the dust of the church into the churchyard, who will undertake to sift those dusts again, and to pronounce, This is the patrician, this is the noble flour, and this the yeomanly, this the plebeian bran?”—i. 241. The next sermon to this contains a similar thought, more elaborately detailed, i. 261; and we have it again in a third sermon in the same volume (Alford's edition, i. 384).

Dr. Donne was not the only preacher during the Stuart dynasty who seized on this imagery for the display of his eloquence. In Pepys' Diary (March 1663-4) we have an account of a sermon of Dr. Critton's, at Whitehall, where the following passage occurs:—

“He told the King and the ladies, plainly-speaking of death, and of the skulls and bones of dead men and women, how there is no difference: that nobody could tell that of the great Marius or Alexander from a pycner; nor, for all the pains the ladies take with their faces, he that should look in a charnel-house could not distinguish which was Cleopatra's, or fair Rosamond's, or Jane Shore's.”

\* Donne's *Sermons*, Alford's edition, ii. 436.

opened to reasonable discussion. A preacher, whether the exposition of dogma or the exhibition of eloquence were his object, was more sure to get a congregation, than a congregation was to get a preacher. Queen Elizabeth herself had no love for sermons, and heard them as seldom as she could.\* She thought them, too, a dangerous indulgence for her people, and was constantly occupied in what she called "tuning" her pulpits, *i.e.*, keeping down their occupants to a prescribed routine of catechisings or homilies; and her successor, though personally fond of theological disquisition, felt the extreme inconvenience of teaching the populace to think, and did his best, by liminary injunctions, to gag the Puritans. The taste nevertheless waxed strong on all sides. "Now is the world of sermons," said Bishop Andrews: "for proof whereof (as if all godliness were in hearing of sermons), take this very place, the house of God, which now ye see well replenished. Come at any other parts of the service of God (parts, I say, of the service of God no less than this), you shall find it in a manner desolate; and not here only, but go any whither else, ye shall find even the like." A great change this in the habits of English pastors and congregations from the days of Latimer's old mass-mongers and "unpreaching prelates." The High Churchmen themselves, though at first they disparaged long and frequent sermons, and complained that preaching was cultivated to the subordination of scriptural reading and prayer, found it advisable to try to guide a tendency they could not suppress, and held their pulpits with a tenacity which even the long-winded Puritans could hardly outdo. Burnet, in his amusing way, tells us of Bishop Forbes of Edinburgh, who officiated at Charles I.'s Scottish Coronation in 1633, that he had a "strange faculty" of preaching five or six hours at a time.†

But Forbes was a bishop, and bishops were licensed men, and mostly of the Court fashion in theological opinion. Government did what it could to stop this excess of preaching, in the Calvinistic sense, by royal injunctions, requiring all below the rank of bishop or dean to confine themselves to

printed homilies or plain exhortations on the practical parts of Scripture, for that, as Archbishop Abbott expressed it with something of the picturesque but medley metaphor of his time,—“The usual scope of very many preachers is noted to be a soaring up in points of divinity too deep for the capacity of the people; or a mustering up of much reading; or a displaying of their own wit; or an ignorant meddling with civil matters, or a venting of their own distastes, or a smoothing up of those idle fancies which, in this blessed time of peace, do boil in the brains of unadvised people.”

It was to no purpose, however, to wage war against the national instincts, as though they had been the mere caprices of wayward children. The Romish proclivities manifested by the Court and prelatical party drove the people more and more to the Puritans, "who," says Neal, "being constant preachers, and of exemplary lives, wrought them up by their awakening sermons to an abhorrence of everything that looked that way."\*

It was to the agency of their unparochial and not always ordained "lecturers," that the Puritan party, like the Lollards of a former day, mainly looked for keeping up and extending their influence; establishing these in the large towns, where religious and political topics were wont to be eagerly and intelligently discussed. Selden compared these lecturers to the friars of old, carrying away both the money and the affections of the people from their parish ministers. Heylyn said of them that they were like bats and rere-mice, neither lay nor clergy, "neither birds nor beasts, and yet both together." They were intensely hated and feared by the rival party; the more when the Puritans, anticipating the experiment of our "Evangelical" party in modern times, bought up a number of lay impropriations to bestow on zealous divines, capable of expounding the Word of Life, and willing to encourage the co-operation of the new volunteers to any extent. Precisely the same species of jealousy, shown at a later period by the parochial clergy towards the Methodists, was exhibited in the seventeenth century towards these lecturers, exemplifying the truth of Macaulay's well-drawn contrast between the Church of England and that of Rome in this respect: the greater facilities for absorbing spontaneous enthusiasm, so to speak, in the latter, which always found a place within her recognised system for the new orders of monks and friars as they arose, instead of, like the English Establishment,

\* "Touching the religion of the Court, she seldom came to sermon but in Lent time," says Howel in his *Familiar Letters*.

† *Own Times*, i. 22. We suspect the worthy prelate of a little malicious exaggeration here. In another work, where he gives a more favourable character of Bishop Forbes altogether (Preface to *The Life of Bishop Bedel*, 1685), he says of him, "He preached with a zeal and vehemence that made him forget all the measures of time; two or three hours was no extraordinary thing for him."

\* *History of the Puritans*, by Daniel Neal, i. 490.

eastings off all irregulars as dissenters and aliens.

And no doubt the strong and earnest movement of the national mind, which, beginning in fidelity to Reformation principles, resulted in the overthrow of Prelacy and Monarchy, and the triumph of a stern sectarianism, was in great measure the work of these Puritan preachers and lecturers. Donne, with all his "imperial logic," and Andrews, and Taylor, might spend their fancy and learning on the composition of wise and eloquent discourses: they had not one-tenth part of the power to prompt and sway the wills of strong men that was wielded by those declaimers who recognised the living interests of the day as well as the older truths, who went straight to men's inmost conscience of right and wrong; who denounced sin, superstition, and servility with the thunders of the prophets of old, and gave the reasoning powers of their auditors matter far more momentous to work upon than graceful metaphors and pious fancies. To these teachers, the beauties of illustration in which Donne and Taylor so largely expatiated seemed mere frivolities. Their comparative faculties were content with nothing short of rigid analogy. It was a fallacious task they set themselves indeed, to adjust the mysteries of sin and redemption to their types of earthly resemblance; but it was wonderfully inspiring to minds that honestly believed in the aptness of the comparison, and thought they could thus read the riddles of God's government unfolding themselves before their eyes. It was no admiring hand that describes them, from a contemporary point of view, as those

"Sons of zeal, who to reform  
Their hearers, fiercely at the pulpit storm,  
And beat the cushion into worse estate  
Than if they did conclude it reprobate:  
Who can outpray the glass, then lay about  
Till all predestination be run out;  
And from the point such tedious uses draw,  
Their repetitions would make Gospel, Law."

Of the great preachers who filled the Puritan pulpits in the Commonwealth era—such as Baxter, Owen, Bates, Howe,—we have little to say in a literary point of view beyond what has already been said of the Marian victims and their fellow-workers. The chief distinction between the two generations of divines is that in the latter, personal experience occupied a more important place in sacred parænesis; the doctrines of assurance, grace, and predestination were subjects constantly discussed and brought home to the tribunal of self-consciousness with a more direct appeal than in the days

of the first revolt from Rome, when the controversy bore more of a scholastic character. Hence arose a turn for casuistry, in which some of the preachers in the later period were very skilled and laborious professors. A superstitious regard for every word and particle of Scripture led to a minuteness in the dissection of texts, which, though not peculiar to the Puritans—for we have numerous instances of it in Donne and other High Church divines; in fact, it had been common among the old monkish preachers on the Continent,—became in their hands matter of more serious insistence. Dr. Manton's 190 sermons on the 119th Psalm in early life drove Lord Bolingbroke into being a High Churchman, as that scoffing nobleman was wont to say.

With the settling down of the old foundations at the Restoration, emerged the still unbroken line of High Church preachers, whom we have mentioned as beginning with Donne or Hooker, and who continued to exercise a paramount influence on Anglican theology until the Revolution.

Sweetest of all, most gracious, imaginative, and persuasive, Jeremy Taylor, to cultivated minds undoubtedly a welcome relief after the inexorable and narrow logic of the Calvinistic divines, yet as we have said, far from being as powerfully convincing of "sin, and righteousness, and judgment," to such as yearned for definite conflict with the evils of the world. More poetical than Donne, we had almost said: and yet, though this would probably be the general verdict, we retract the unuttered opinion. Taylor was more tender, more variously imaginative; his weight and extent of learning, his happy applications of history, poetry, and philosophy, his classical taste, the quiet humour which so often blends with his seriousness, are among the well-known attractions of his style: but he lacked, we think, the concentrated energy, arising from depth of feeling, which at times makes the diction of Donne sublime, and which enabled that remarkable man to indite verse no less vigorous than his prose. The few specimens of Jeremy Taylor's verse which have met our eyes are utterly worthless.\*

\* We are glad to have our opinion of the superiority of Donne to Taylor countenanced by so competent a judge as the Dean of Canterbury. "The reader of the following sermons," he says, in the life affixed to his edition of Donne's *Sermons* (1836), "will find sentences and passages which he will be surprised he never before had read, and will think of ever after. In depth and grandeur these far surpass (in my judgment) the strings of beautiful expressions to be found in Jeremy Taylor. They are the recreations of a loftier mind: and while Taylor's similes are exquisite in their melody of



Barrow stands forward as, next to Taylor, the glory of the Restoration era. His *forte* was reasoning. His theses were on moral and religious duties, not on doctrinal mysteries. He would work out his argument in all its bearings, and state it with the technical precision of a legal indictment, or a preamble to an Act of Parliament. His prolixity, however, is redeemed by an energy of thought, and a treasury of available learning, which elevates and often astonishes the reader of his sermons, and stamps him as one of the select band of Anglican orators whose compositions posterity can by no means afford to let die.

South closes the list : a preacher in whom real eloquence and power of argument were blended with a coarse buffoonery, showing his acclimatization in the wit and license of the later Stuart rule, rather than in the decent solemnity of that which preceded the civil wars. South, with his aversion from all doctrinal enlargements and mystic warmth, in some measure paved the way for the common-sense school which next took up the tale of rhetoric divine in the Church of England. But the origin of that school is still more to be ascribed to the little nest of "Platonizing" divines, of which Burnet gives so engaging a description in his *History*, reminding us of the royal spirits in Dante's poem, who sit apart, in mystic song and contemplation, on the confines of Purgatory : —

"Quivi seder cantando, anime vidi,  
Che per la valle non parean di fuori."

When the wealth and prosperity which the restoration brought to the successful party in Church and State had produced its natural result in a corrupt and bigoted clergy, the salt of the Establishment concentrated itself chiefly in a knot of divines, for the most part Cambridge men, who lived apart from the vanities of the world, to cultivate piety and tolerance, two virtues which the current opinion of the times had long dissevered. Their turn of mind led them to shrink from doctrinal and ecclesiastical dogma, and to dwell on the calm results of philosophic thought, whether among Christian or heathen sages, as the evidence of the soul's connexion with a higher life. Whichcote, Cudworth, More, Wilkins, Worthington, were among the first generation of these wise and virtuous divines; and the most eminent preachers formed in their school were Tillotson, Stillingfleet, Patrick and

Lloyd. The influence of these men on the style of preaching in the Church of England may be best described in the words of Burnet, who loved and admired them with all the warmth of his genial nature : —

"This set of men" he says, "contributed more than can be well imagined to reform the way of preaching; which, among the divines of England before them, was overrun with pedantry, a great mixture of quotations from fathers and ancient writers, a long opening of a text with the concordance of every word in it, and a giving all the different expositions, with the grounds of them, and the entering into some parts of controversy, and all concluding in some, but very short, practical applications, according to the subject or the occasion. This was both long and heavy, when all was pyeballed, full of many sayings of different languages. The common style of sermons was either very flat and low, or swelled up with rhetoric to a false pitch of a wrong sublime. The king (Charles II.) had little or no literature, but true and good sense, and had got a right notion of style; for he was in France at a time when they were much set on reforming their language. It soon appeared that he had a true taste. So this helped to raise the value of these men, when the king approved of the style their discourses generally ran in — which was clear, plain and short. They gave a short paraphrase of their text, unless where great difficulties required a more copious enlargement; but even then they cut off unnecessary shows of learning, and applied themselves to the matter, in which they opened the nature and reason of things so fully, and with that simplicity, that their hearers felt an instruction of another sort than had commonly been observed before. So they became very much followed; and a set of these men brought off the city in a great measure from the prejudices they had formerly to the Church.\*"

Note this last sentence. We see that Burnet specifies as a result of the rational style he has been describing the bringing back many to the Church from the extravagances of Puritanism. This is remarkable, as showing how inevitably the principle of reaction obtains in religious as in other fashions. The excitement of one age leads to the calmness of the next. The mild ethics of Tillotson were welcome as lubricating tempers chafed and irritated by the wild war of dogma in the generation that had sped its course. Burnet, indeed, elsewhere speaks even enthusiastically of a fashion of preaching which would seem in itself so rigidly opposed to enthusiasm. In the preface to the second volume of his *History of the Reformation* he alludes to the "excellent and plain way of preaching" which had come into vogue in his time, and "which,"

sound, and happy in external description, Donne enters into the inner soul of art, and gives his reader more satisfactory and permanent delight."

\* Burnet's *History of his Own Times*, i. 346.



our literature half a century ago! We find it in the "poetical diction" which enthralled most of our verse-writers till Wordsworth rushed into simplicity. We find it even in the school-histories and common story-books of our parents as compared with our own. There was no notion among the Mother Bunches and Mrs. Trimmers of those days of really *writing down* to children as they are *written down* to now. Nor was there much more idea that a congregation could be *preached down* to except by the illiterate ranters who swelled the ranks of vulgar dissent.

When Johnson's opinion of pulpit oratory was asked on the occasion above cited, he followed up his answer with the remark, "We have no sermons addressed to the passions that are good for anything, if you mean that kind of eloquence." We shall find this observation hold true throughout this department of our literary history; and it marks a distinction between English didactic divinity and that of the leading French and Italian preachers. No English sermons addressed to the passions have ever earned an abiding literary reputation. The sermons of Wesley and Whitefield came nearest to them in principle. They were addressed to the passions, or to emotions that border on passions; it was love, hope, fear, remorse, which prompted those vehement responses of which the annals of the Methodist revival are full, when tears and agonies and shoutings infected whole congregations till they issued sometimes in fever or madness; but as compositions there was no refinement or cultivated eloquence in these utterances that proved so wonderfully heart-stirring at the time; nor have we any names in the pulpit records of the Anglican Church answering to those of Massillon, Fléchier, and Bourdaloue among French preachers. It is by the workings of thought and the graces of sentiment and imagery that our most successful religious oratory has ever been achieved. And here we are inclined to claim a small niche of notability for that most unclerical divine, Sterne, whose original gifts of pathos and expression give an individual character to his sermons, and make them often, even now, with all their mannerism and affectation, touch the springs of real human feeling more than any others of the Johnsonian period. May we cite one short passage as an instance?—

"It pleases Heaven to give us no more light in our way than will leave virtue in possession of its recompense. Grant me, gracious God, to go cheerfully on the road which Thou hast marked out. I wish it neither more wide nor more smooth. Continue the light of this dim

taper Thou hast put into my hands. I will kneel upon the ground seven times a day to seek the best track I can with it, and having done that, I will trust myself and the issue of my journey to Thee, who art the fountain of joy, and will sing songs of comfort as I go along."

But, at the date aforesaid, the oratory of plain reasoning had still its greatest representative to produce for the century, and this was Paley—younger than Sterne by thirty, by Wesley than forty, than Blair by nearly twenty years. Enthusiasm had no charms for Paley; but he had seen too much of the age's requirements and dangers to rest complacently in the sleepy truisms which had sufficed for the Clarkes and Sherlocks, from whom he was intellectually descended, or in the sonorous periods of the Blairs and Ogdens. His eminently logical mind delighted in statement and induction; but it is not only by his pellucid reasoning that his sermons attracted and still attract attention. They display a chastened fervour of piety, borne in upon the processes of his argument, which is the more impressive, to our mind, from the quiet mode of its introduction. The discourses of Paley are even now valuable *pabulum* for the pulpit. We have heard them with content from the dullest lips that ever droned an audience asleep. Delivered with due emphasis, it seems superfluous to add, we had far rather listen to them than to any chance discourses of the day, hot and hot from the clerical oven. Turn to the peroration of his thirty-third sermon, on "This Life a State of Probation." What can be more beautiful, more pathetic in expression, with the pathos of real feeling, based on unexaggerated truth of statement? Or again, take the concluding passage of his sermon on "Prayer in Imitation of Christ;" which, as it is short, and in his most characteristic style, we may be allowed to quote:—

"Scenes of deep distress await us all. It is in vain to expect to pass through the world without falling into them. We have, in our Lord's example, a model for our behaviour in the most severe and most trying of these occasions: afflicted, yet resigned; grieved and wounded, yet submissive; not insensible of our sufferings, but increasing the ardour and fervency of our prayer in proportion to the pain and acuteness of our feelings.

"But, whatever may be the fortune of our lives, one great extremity at least, the hour of approaching death, is certainly to be passed through. What ought, then, to occupy us? What can then support us? Prayer. Prayer, with our blessed Lord himself, was a refuge from the storm; almost every word He uttered, during that tremendous scene, was prayer,—prayer the most earnest, the most urgent, re-

peated, continued, proceeding from the recesses of His soul; private, solitary; prayer for deliverance, prayer for strength; above everything, prayer for resignation."

There is in these passages not a word too much—not a sentence of declamation or mere fine sentiment. The fault of Paley's sermons, indeed, is that he does not trust himself to launch out a little more into the region of emotion. When reason has done her work, and shown the strength of the position, then is the time for vigorous application, whether of reproof or exaltation. When the steed has been well tamed with bit and bridle, then let it bound over the course. But Paley's fervour never carried him on to any enlargement of expression. The bit and bridle were always at hand.

Evidential sermons still abounded *ad nauseam* in the early part of the present century. The typical infidel was brought to the bar in a summary way, and covered with dire disgrace, by half the new-fledged curates who mounted the pulpit stairs; and truly, if they were as weak as their triumphant antagonists represented them, the infidels courted their discomfiture, and the wonder is that infidelity ever had another word to say. A country clergyman once composed a sermon—or rather, we believe, it was a treatise in dialogue form—representing an argument between a Christian and a Buddhist. By way of varying the form of the old debate, he gave his "atheist" the style of one of these Asiatic sectarians; and having written his dialogue, he showed it to a local dignitary of the Church, of high repute in the diocese as well for his humour as for his personal piety. "Very well, Mr. G., very convincing and conclusive," said the Archdeacon, after perusal; "but, sir," with a Johnsonian roll of the voice, "you should get a better Buddhist!" Certainly the estimate of the "rights and duties" of argument has made some strides in advance during the last half-century. We dare not parade such very feeble "Buddhists" now for the purpose of knocking them down incontinently, as our fathers did. However bad *au fond* we may think the infidel's cause, we feel that flimsy and unfair contradiction is hardly the best method in the world for silencing him. We do not say that all minds, even now, are by any means alive to this conviction, or that very feeble Christian advocates may not still be found tilting against idiotic Buddhists of their own creating, and upsetting them with their little finger; and with them, as they are pleased to think, all the armour wherewith the criticism of Colenso and the Essayists could clothe them. But such self-sufficient

advocates are not listened to by the upper ranks of our intellectual life as the earlier fulminators of anti-Buddhist harangues undoubtedly were wont to be. On the contrary, there is nothing the Christian sage now so thoroughly deprecates as superficial and indiscreet partisanship. For this furnishing up of our controversial weapons we are indebted to the German schools of theology which arose during the present century.

At the distance of fifty years from Paley our survey lights upon the pulpit teacher who may most fitly be mated with him in the combination of deep piety and a firm belief in the fundamentals of revealed truth, with strong original powers of reasoning, and a jealous distrust of superstition and mere hearsay credulity. Inquiry had taken a new range between the days of Paley and Arnold; and the attack and defence of Christian doctrine were carried on in shifted quarters; but the standing-point of these able men bore a similar relation to the outlying posts of scepticism and bigotry, allowing for a little less of critical daring on the part of the elder, owing to the as yet unopened vistas of criticism in his day. In their cast of opinion both Paley and Arnold may be considered in great measure heirs of those saintly "latitudinarians," round whom Burnet cast such a halo of interest; but there was this distinction, that with Cudworth More, etc., a certain metaphysical mysticism coloured their religious conceptions—metaphysical speculations being eminently the taste of their age. With the latitudinarians of the later generation, critical processes regarding the history and text of Scripture contributed to form the basis of their principles.

Arnold's is, unquestionably, the most representative name in liberal theology during the decade from 1830 to 1840. If, as a theologian, it may be said he only adopted the views which German critics had already put forth, and so far was not an original thinker, he at all events was the first to assimilate and adapt those views to the genius of the English pulpit. His sermons form an era in our parænetic divinity. He had the gift, which so many first-rate thinkers are without, of throwing the whole sympathies of an ardent spirit into opinions rigorously free from exaggeration or mere sentimentality; and thereby of moulding them, and making them instinct with the power to nourish the moral and spiritual life, as well as to exercise the understanding.

And he had all the zeal of an apostle in what he felt to be the holy cause of bringing minds to a wholesome and manly service of God. How far his views may have been correct, as to the precise adjustment of faith and

reason at which they pointed, is a question of opinion into which we need not here enter; but as regards his pulpit ministrations, this was the fulcrum from which he worked his lever, and no man ever wielded it with a more unfaltering hand. Men and boys were to him alike fitted for its application. The human mind, so he held, should take up its right position when first able to reason and to pray at all. Thence the fault so often found with him, that he sought too early to form the opinions of his scholars, and left them really less guarded against opposite impressions than if the process had been more gradual and unforced. Cherished by all who can recall it is the remembrance of that high-souled Mentor, speaking his earnest yet familiar thought to the young auditory assembled within his well-loved chapel walls. The keen eye, the knitted brow, the animated but somewhat measured cadence—a little in the “spouting” method of delivery, distinctive of old-fashioned academic training—the sudden grating of the voice, which denoted ever and anon that his own warm, anxious feelings were moved by the argument he was enforcing, to hear him and to watch him thus, one hardly wondered at the rapt attention which held fast the restless limbs and wandering glances of three hundred boyish listeners. If sincerity and self-forgetting earnestness ever made an orator impressive, it was so in the case of Arnold. To his composition we have already adverted. It was novel to his generation, as exhibiting the use of unadorned language chosen entirely for its power of expressing meaning, and not from any traditional association with, or supposed *fitness* for, sacred themes.

We must not linger on special developments of the mere oratorical faculty in our own time. Nor may we turn aside, at the end of our long journey, to do for the great preachers of our own Northern Church what we have just endeavoured to do for those of England. The temptation is strong; for, besides the striking parallels which might easily be drawn, after the manner of Plutarch, we persuade ourselves that we should deserve well of our readers were we to brighten for them the faded memory of many venerable names, scarcely known at any time beyond the Border, and little remembered now, even by our own countrymen. Most of us, to be sure, know how Knox used to “ding the pulpit in blads;” and the immense practical influence of Chalmers would keep his memory fresh for generations, even if his fervid and majestic eloquence ran any risk of oblivion. But the centuries which divided Knox and Chalmers produced great masters of sacred eloquence, who scarcely deserve to

be entirely forgotten among the crowd of contemporary sermonizers. And yet that is the fate which has befallen even the greatest among them. Few people in this generation have ever heard of Rollock or Bruce; and if Robertson and Erskine are known to anybody, it is probably to the readers of *Guy Mannering*. But for that very reason we must postpone the history of the Scottish pulpit, and confine ourselves for the present to the English side of the Border. To complete our task it is still necessary to take note of two remarkable occasions of “excitement” in religious oratory, which in our own and our fathers’ days have taken place outside the English Established Church, but within the sphere of English life. These are, the oratory of the Scottish minister, Irving, in 1823, and of the Baptist Spurgeon, within the last ten years.

Hatton Garden, near which was situated the Caledonian Chapel, in which Irving officiated, was thronged at the first period referred to by the learned and the fashionable; by statesmen and wits, lawyers and noblemen. The carriages of the royal family even were wont to mingle with the other coroneted vehicles that crowded the narrow street where the stern prophetic preacher held forth in periods of glowing rhetoric upon the worldly and hollow principles of the professing Christians of the age. Much has been written about Edward Irving of late. His name is familiar to all who have read the very interesting record of his life by Mrs. Oliphant. But it may not be superfluous here to quote the manuscript notes of one—a man of taste and a scholar—who thus sets down his impressions on each occasion after hearing him in those earliest days of his London notoriety, when none could say whither the eccentric meteor would direct its flight, and opinions were divided as to its betokening the mission of an apostle or a charlatan:

“*Sunday, June 29, 1823.*—I certainly never witnessed such a combination of all the qualities of an orator in such high perfection. Countenance, gesture, voice, all grand and imposing in the greatest degree. Frequency and force of imagery equal to Jeremy Taylor. In flow of words and structure of sentences perhaps more resembling Barrow. A vehemence which, with less dignity of action and impressive seriousness of demeanour, would have been rant. Enthusiasm, not misplaced on mere matters of speculative doctrine, but exerted in the cause of genuine Piety and Virtue. A sustained and habitual reverence of human learning and attainments, of the powers of imagination and genius, only kept in due subserviency to the great end of religion. To conclude, a tone and manner inspiring the hearers with a conviction of truth and sincerity, and of a belief in the preacher of

his own divine appointment to the office of persuasion and reformation. I saw Lords Liverpool, Lansdowne, Aberdeen, Essex, Canning, Heber, and many more persons of distinction whose persons were unknown to me, and many ladies of the first rank and fashion.

"July 13.—This morning I again crowded in to hear Irving, and am confirmed in my opinion of his most extraordinary powers, though I detected a greater mixture of bad taste than at the first hearing. The sermon was on God's mercy and justice. He exposed, with most expressive and solemn eloquence, the perilous folly of those who quiet their consciences with the opiate of unlimited and unconditional forgiveness; exposed its utter inconsistency with the true character of God's providence and the scheme of creation; and said that such a conception was making of heaven a sort of Whitefriars or Alsatia—a receptacle of everything profligate and abandoned on earth. This was *bad*, because the allusion necessarily carries the mind to the light works of imagination—plays and romances—in which alone the prototype of the image is now to be found; and it is therefore an unreasonable disturbance of our thoughts, and an abstraction of them from the solemn subject which it is brought forth to illustrate. But it was still worse when, assuming the tone and character of an immediate delegate from heaven, he uttered, in the language of a king's writ, 'All men to wit! the Almighty God, Maker of Heaven and Earth commands,' etc. This would be merely and shockingly ridiculous in a common preacher, and Irving's grandeur of voice and gesture could not redeem it. Even with the defects I have noticed, there is something most powerful and persuasive in the matter as well as the manner of his sermons, and I cannot listen to them without feeling some of the same enthusiasm which inspires the Preacher, and makes him regard himself as the commissioned Reformer of the great, and rich, and worldly-minded who flock together to listen to him."

But much as he was admired by all classes before sectarian extravagance overmastered him, and fine as his orations still appear to our judgment on reperusal of the written page, Irving made no special mark on the Church of England. Spurgeon, with marvellous fluency, aptness of illustration, ready humour, sweetness of fancy, and with the most perfect conceivable organ of speech, is altogether a more vulgar type of orator, yet he will probably be more noted in the remembrance of posterity for the impulse he has given to the energies of the Establishment; and it is on this impulse that his future fame will be founded, rather than on any abiding monuments of his own eloquence. He is far more of a preacher for the common orders than Irving was. Irving was all solemnity: his very colloquialisms were of a quaint and stately order. Spurgeon revels in daring homeliness. Irving was a man of

education and study. Spurgeon had little of the cue, and probably has no turn for the other. Nevertheless, it is certain that he has attracted to his open air or his "Tabernacle" orations innumerable crowds both of the ignorant and the wise; of Dissenters putting a blind faith in his doctrines; and of fashionable critics, seeking merely for a new sensation.

And as in the time of Wesley, so now in the time of Spurgeon, the Church of England, by its natural sympathies always resting more upon the upper ranks, has begun to shake herself, and inquire how she may fulfil that almost forgotten part of her duty which consists in the evangelization of the lower stratum of society. Hence evening services, cathedral naves thrown open for worship, services shortened, and every effort made to render the teaching of the pulpit more intelligible, more attractive, and more "sensational."

But the Church of England has a double mission to perform; and in this lies, and always has lain, her chief difficulty. Methodists and Baptists consist in greatest part of the classes below the highest cultivation. The Church has to keep her hold on the most advanced intellects of the land as well as on the humbler orders. To use the phrase of Donne, "she must preach to the mountains, and preach to the plain likewise." It is not always easy for a man of first-rate education to focus his addresses on the poor. It is still less easy for one whose time must be much spent in the practical duties of his profession, to deliver sermons which can reach the reason and conscience of men of practised intellect. The consequence is that the general preaching of the Church of England is a sort of midway compromise, utterly ineffective for both purposes. This is the complaint of the day, and it deserves being looked into.

We will first glance at a few of the suggestions which have been offered for improving the ways and means of pulpit instruction. "Something must be done," is the cry from newspapers, synods, and drawing-room coteries alike. Dulness has passed all legitimate bounds, says the British public. It is an infliction little short of tyranny to make a man of sense sit through such commonplaces as he is weekly pelted with from the preacher's post of vantage. Go from church to church, what do you hear? The rector's pompous platitudes in the morning, the curate's offensive dogmatism, or more offensive would-be impressiveness in the afternoon. The duller the matter, the longer the discourse: and then how utterly unenlivened, in most cases, by any taste in elocution or

delivery! For ourselves, we confess to thinking the curate-infliction the greatest penance of the two; particularly in the metropolis, where, partly from ambition, and partly from the fear of being detected in plagiarism, a young performer will generally parade themes of his own composing, and indulge in varied experiments of mannerism. For the chance of an edifying discourse, we had really rather on the whole encounter a chance sermon in an obscure rustic village than in a London afternoon congregation. The possibility always is, in the first case, that the parson has not given himself the trouble of composing, or even "compiling," a discourse at all, but has taken some ready printed article into the pulpit with him, secure that the theft will not be discovered by his people; and odd enough the contrast often appears between the intense homeliness, the "hawking and chopping" manner of the delivery, and the superior character of the thoughts and imagery. And this brings us to the first amendment that we would suggest. Let the re-preaching of old and approved discourses be much more frequent and acknowledged and systematic than it is. Let there be no shame or misconception about it. A popular reciter of profane literature attracts crowds merely to hear him read passages from Dickens or Shakespeare or Sterne, or any of our good prose writers, of whatever age. A well-chosen discourse, even of as old a date as Leighton or as Paley, would probably afford far more useful food for meditation and assimilation than any hash the neophyte could produce from his own brain.

Sir Roger de Coverley was a wise man, we think, when he made his chaplain a present of all the good sermons which had been printed up to his time, with the condition that he should preach one of them every Sunday. "As Sir Roger was going on in his story," says the *Spectator*, "the gentleman we were talking of came up to us; and upon the Knight's asking him who preached to-morrow, for it was Saturday night, told us, the Bishop of St. Asaph in the morning, and Dr. South in the afternoon. He then showed us his list of preachers for the whole year, where I saw with a great deal of pleasure Archbishop Tillotson, Bishop Saunderson, Dr. Barrow, Dr. Calamy, with several living authors who have published discourses of practical divinity. I no sooner saw this venerable man in the pulpit, but I very much approved of my friend's insisting upon the qualifications of a good aspect and a clear voice; for I was so charmed with the gracefulness of his figure and delivery, as well as with the discourses he pronounced, that I

think I never passed any time more to my satisfaction."

Dr. Mason Neale sneers in his most contemptuous fashion at this sample of missionary lukewarmness; but we only wish Sir Roger's method were more commonly followed at the present day. A good aspect and a good voice, and a good ready-made sermon, are requisitions which most patrons would, for their people's sake, do well to insist upon. We can testify to this from an example within our own experience, where the clergyman is one of the most zealous, and his pulpit ministrations some of the most impressive we know, and where the practice of preaching borrowed sermons is openly avowed. For what is the sense of the matter? An active parish priest whose heart is in his work, is busily occupied during the week with attending to his parishioners far and near—praying with the sick, counselling the perplexed, rebuking the sinful. How can he command time and energy to compose thoughtful and wise discourses for his Sunday services? The days are past of the *hunting parson* of Herrick's verse:—

"Old Parson Beanes hunts six days of the week,  
And on the seventh he hath his notes to seek.  
Six days he hollows so much breath away,  
That on the seventh he can nor preach nor pray."\*

But the round of a serious clergyman's week-day labour is not less absorbing than when he followed the huntsman's horn and halloo.

No doubt there are those who have the gift of ready utterance as well as fervid thought, whose natural impulse is to speak out from their own bosom the truths with which they are laden. Such, if hard-worked men, with plain congregations, might ponder the advice of a French priest, the Abbé Mullois, chaplain to the present Emperor. It occurs in a work entitled "*Cours d'Eloquence sacrée populaire*."

"'The sermon should be short,' says the Abbé: 'at all costs it must not weary the hearers. Besides, what good, what motive is there in so much talk? I know not how it is that we have been drawn into these long discourses. Our Saviour's instructions were brief. His Sermon on the Mount, which has revolutionized the world, does not appear to have taken up half an hour. The homilies of the Fathers too were generally short; and St. Ambrose says, *Nec nimium prolixus sit sermo, ne fastidium pariat, semihoræ tempus communiter non excedat*."

\* Not so long past however. Some of the latest specimens lingered in our own days on the borders of Dartmoor, and were scarcely less literally true to their type than Parson Beanes himself.

"It would undoubtedly benefit religion were we to abridge our sermons and our services also. As regards the former, this may be done easily, and without the least detriment. Omit all generalities from the exordium, all useless demonstrations from the body of the discourse, all vague phrases from the peroration. Cut off all superfluity of words, admitting only such as triple the force of the substantive. Be chary of words and phrases: economize them as a miser does his coin.

"When about to compose your sermon, first study your topic, seizing the salient points of the truth you are going to expound, and then write. But do not stop there—begin afresh. Supposing you have written four pages, reduce them to two, retaining all the thoughts and vigorous ideas of your first draft. On ascending the pulpit, place a watch by your side, and begin thus: 'On Sunday last we said so and so, let us proceed.' Then enter at once upon your subject, cutting it short when the appointed time arrives. People will say that you do not preach long enough, that you tantalize your audience, and rob them of a real pleasure by being so brief. Heed them not, but remain inflexible, for such persons are unconsciously real enemies to religion. Adhere more strictly than ever to your prescribed rule; then rest assured that your discourses will be talked of; every one will be anxious to *witness* a seven minutes' sermon; the poorer classes will come, and the rich will follow. Faith will bring the one, novelty will attract the other, and thus the Divine Word will have free course and be glorified."

A seven minutes' sermon is, it must be confessed, rather a homœopathic prescription. Most English constitutions are tough enough to stand a quarter of an hour, or even twenty minutes, and would, we fancy, with their innate loyalty to the pulpit, scarcely think themselves properly dosed with less. But concentration, instead of dilution of thought, system, point, purpose, directness of language, these are recommendations that cannot be too strongly enforced.

As a minor matter, we have often wondered why—a text being the recognised necessary condition of every sermon—more advantage is not taken of the great variety the Bible affords, to raise legitimate surprise and expectation in an audience. We do not admire such eccentricity in the choice as was evinced by the preacher who launched a sermon from the "nine-and-twenty knives" of Ezra i. 9. We consider, too, that it was rather too daring an experiment in the manipulation or manufacture of a text which a late highly esteemed divine ventured upon when he puzzled a St. Paul's congregation three or four years since by giving out as the motto of a very eloquent discourse the words, "We may, we must, we will," brought together from sections of three different verses of the Bible. The practice might be

indefinitely abused. No doubt the line is a fine one between a strained interpretation and an interesting elucidation of unusual texts. Still, a little fancy and ingenuity might be employed in drawing out the meanings and possible applications of pregnant words that do not belong to the regular run of those hackneyed passages the very utterance of which so often seems to bar our hope of anything that will arrest attention in the commentary that is to ensue. A text may fairly enough be propounded as a motto for a theme, and not necessarily as a problem for solution.

On the indispensable necessity, for all purposes of really effective preaching, of a good manner and elocution, it is impossible to lay too much stress. We all know what unpretending addresses may become impressive from taste and animation in the delivery, what fine orations dull from wanting them. As this is, it would seem, an accomplishment which requires no genius, but only simple painstaking, to acquire, the wonder is how egregiously it is often neglected. Surely it would be well to make it a subject of severe test-discipline in all aspirants to the ministry.

Much is to be said for the device adopted in several metropolitan churches of interposing a pause between the prayers and sermon, so as to permit the withdrawal of those whose attention to the service is already fatigued, or who flinch from the possible dreariness or objectionable doctrine of the next half hour. Moreover it would have the effect, if generally adopted, of keeping the clergy more alive to the responsibilities of their position, and making them more anxious to interest their audience. Elocution, we take it, would have a better chance of being studied, and self-conceit might find its zeal for original composition abated.

But shame and pity it would be, we most emphatically pronounce, if, in this age of enlightenment and cultivation, religious topics should be held unequal to any further development of oratorical ability, and men be everywhere content with the prepared efforts of the past, or with spasmodic appeals calculated to attract the vulgar for the moment.

We hold the study of pulpit eloquence to be a most noble and important object, demanding the highest faculties of thoughtful men; only it should not be left to those overburdened already with practical cares. Why should not the Church resort to the methods pursued in the early days of the reformation—originally indeed exemplified by the better type of Friars Predicant under the older system—and have preachers regularly trained and educated for the task, and



sent round at stated seasons to give parishes, town and country, some revival in the style and mode of their instruction. There would be the advantage of curiosity and change; for one great cause of the inefficacy of our pulpit oratory is the weary monotony of hearing one and the same voice and manner from year's end to year's end. There would be the opportunity of stimulating the intellect; for it may be supposed that such missionaries, examined and licensed for their task, would have cultivated the intellectual aspects of theology more than the parish pastor has time to do. Variety of views and treatment there might be; but in these days of much thought and much reading, where is the sense of supposing that a congregation must needs be kept in a beaten track by its spiritual guides? It must never be forgotten that in a case like that of sacred oratory, where the same topics have to be handled from age to age, where, according to La Bruyère's eloquent description, the preacher has to walk by well-worn paths, to say what has been said before, and what (within limits) every one knows he is going to say; where, important as his subject-matter is, it is nevertheless trite and hackneyed—sound as his principles are, the conclusions to which they lead are obvious at a glance to the auditors before whom he is about to expound them; in such a case, we say, and our survey has gone to prove it, human nature will crave for novelty in some shape or other; and as the substance of a sermon must always be in a certain sense "used up," they will seek it in the mode of treatment. Hence enthusiasm, pedantry, argument, rhetoric, mystic heat, prudential coolness, all may have their turn of popularity, all will pall upon the taste when their fashion is over.

We have spoken with approbation of the practice of delivering old sermons of tried and acknowledged merit: but this is a very different thing from the attempt to resuscitate the dry bones of antiquated oratory by a recurrence to those types which represent the special theological fashions of a time gone by, or a creed not in accordance with current convictions. It is, we hold, a pitiful mistake to sneer at modern "enlightenment," to praise the "ages of faith," in their least estimable qualities, their childishness and superstition, to try to make children of us again by resorting to the lisping words and nursery tales which disciplined society in its earliest stages,

"When all was gospel that a monk could dream."

Yet this is what some of our modern divines would do. The publications of Dr. Mason  
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Neale nine years ago, and of Mr. Baring-Gould during the last year, aim at exalting the preaching of the *mediæval* and *post mediæval* i.e., post-Reformation friars and Jesuits, in contemptuous disparagement of the oratory of the English Protestant pulpit. As signs of the advanced position which Tractarian sympathies have taken up of late years, and which so many other symptoms of religious taste reveal, these publications deserve a passing notice here. They call our thoughts back to the general course of that High Church movement which has been so striking a feature of modern times, and of which the recent ritualistic development is but as it were a second stage.

Let us for a moment consider the different qualities of the two phases. The first was grave, measured, controversial; seeking to establish the validity of tradition and of apostolical succession, and the authority of the early Fathers before Papal corruptions set in. The *via media* of Newman, Keble, and Pusey thirty years ago, was asserted as strongly against Rome as against the "popular Protestantism," of the English Church. Hurrell Froude revealed a stronger bias; and then came the numerous perversions to Rome of those who found the *via media* altogether too narrow ground for their standing; and for a while Tractarianism seemed at a discount. It was not till within the last two or three years that the outside world became fully aware of the very strong vein of Ritualism and Romanizing sentimentalism that was permeating the Establishment. Its influence was no doubt extended by the sensation consequent on the appearance of the *Essays and Reviews*. The "Essayists" stood in startling antagonism to the "Tractarians;" and through the newly stimulated dread of scepticism gave an impulse to the success of the latter party analogous to that which weariness of evangelical theology had afforded in the first instance.\*

In this new fructification of High Church affinities, identity of feeling with Rome in all the sentimental part of her creed and worship is much more generally and openly avowed than was the case before. We are no longer taught to reserve our reverence for the Fathers of the first few centuries. The

\* This year's *Kalendar of the English Church*, a publication representing a very advanced type of High Church opinions, gives a list of sixteen "guilds and brotherhoods" now organized within the Establishment. Of these sixteen two are undated. One was organized as far back as 1844. Between that date and 1862, we find five instituted, between 1862 and the present date, no less than eight; thus just one half of the entire number within the last four years.



homage of our heart, and judgment too, is demanded for most of the saints in the Romish Calendar. Dr. Mason Neale extols the eloquence and unction of mediæval monks and priests. Mr. Baring-Gould goes still further, and would have us seek for the regeneration of our pulpit oratory, not only in imitation of those who—corrupt and ignorant as the Church might be—spoke at least in a Church yet undivided by Reformation, but of those who were Romanist divines, *pur et simple*, Jesuits or otherwise, after Protestant doctrine had worked itself free from the superstitious accretions of the Papal system.

It is far from our wish or purpose to be illiberal. By all means let us be ready to seek for good wherever it is to be found. If valuable ideas are to be gleaned from the utterances of earnest men, who have spoken God's word in sincerity under other doctrinal standards than our own, let us not disdain to profit by them. But let us take them for what they are really worth, and not, by reason of a fantastic dislike to our professed creed and convictions, attribute the greater value to them because they emanate from a communion which our national conscience has over and over again deliberately repudiated.

And what are they really worth, these monastic preachments? Singularly little to the requirements of our modern culture, if the specimens given by Mr. Gould are a fair sample. To none, we believe, but to a very artificially trained minority in any Church of England audience of our times, would it be possible to bring back a state of mind which would make such mystical prattle and legendary lore attractive, or what is called "edifying." Surely it is a sickly sentiment that would wish to make "the child father of the man" in this sense.

These are a few hints only. One or two points have to be noticed before we conclude. Let us once again recall attention to the fact that the complaint of pulpit inefficiency is not a new one.

"Ora si va con motti e con iscede  
A predicare: e pur che ben si rida,  
Gonfia 'l cappuccio, e piu non si richiede."

So Dante complained of the burlesque preachers in his day, five centuries and a half ago.\* The Puritan colloquialisms were not satisfying to the fastidious intellects of the Stuart Courts; the patristic pedantries of the Laudian theologians revolted the practical earnestness of the friends of popular

freedom; the placid ethics of the Hanoverian age were found unsatisfying after the times had had sufficient breathing space from former turbulence and fanaticism. The "evangelical" preaching which was thought the height of Christian eloquence forty years ago, has been exploded since then by the fashions both of High Church and Broad Church divinity. But one thing strikes us as distinctive of the present case. It is not so much that polemical tastes are at issue, as that sacred oratory is no longer abreast of the general intelligence of the community. There has been an advance, unprecedented in its rate of progress, in many departments of experience and discovery within our own generation. While habits of thought and inquiry have spread through classes innocent even of the power of reading formerly, those minds which occupy the highest towers of observation have seen many mists recede before their gaze, many new aspects of familiar subjects unveil themselves. The landmarks of historical and scientific criticism have been inevitably displaced. But meanwhile the body of the clergy, hampered both by traditional limitations and by a conscientious devotion to practical duties of a very absorbing character, have not possessed either the leisure or the inclination to adjust their teaching to the altered estimate of religious and intellectual claims. Fear has made them cling with greater tenacity to forms and modes of the past: and instead of concentrating their main strength on those inner positions which they have it in their power to make secure, they fly with trembling haste to defend each worthless outpost, and shriek that Faith is ruined if any of their technical statement of doctrines are disputed. They look for the strength of argument in reiteration, and for the conviction of antagonists in denunciation. Where the manifest tendencies of an age are persistently ignored or misunderstood what can arise but that the pupils will despise their teachers, and even under-estimate what there may be of good and sound in the counsels they tender? Exceptions there have been, and are, no doubt, to the general failure of the clergy to sympathize with their generation. But here again a professional danger arises, for it occasionally happens that the very zeal to show themselves free from illiberality has led men of acute and imaginative minds to mistakes in the opposite direction. Satisfied with the first crude aspects of change, eager to welcome new ideas before they would seem forced into concession, such men will sometimes omit to wait for the sobering test of time on the hasty theories of the moment, and will be too ready to warp and modify the

\* Cowper's reproof is almost identical—

"'Tis pitiful  
To court a grin, when you should woo a soul."

"'Niccolo,' said Cennini, 'there is a clever wickedness in thy talk sometimes that makes me mistrust thy pleasant young face as if it were a mask of Satan.'

"'Not at all, my good Domenico,' said Macchiavelli, smiling, and laying his hand on the elder's shoulder. 'Satan was a blunderer, an introducer of *novità*, who made a stupendous failure. If he had succeeded, we should all have been worshipping him, and his portrait would have been more flattered.'

"'Well, well,' said Cennini, 'I say not thy doctrine is not too clever for Satan: I only say it is wicked enough for him.'

Novelists are very rarely successful in their dialogue: it seems very difficult to make people talk as they do in real life. In this particular George Eliot is especially happy. She falls short, indeed, of Miss Austen and Thackeray, who, in this point, stand quite alone. But she is conspicuously superior to most writers; and in her this excellence is the more remarkable because her dialogue is not confined to ordinary themes. It is easy for conversation to be natural, when, as with Trollope, the subjects of it are commonplace. But George's Eliot's conversations are natural whatever be the subject. In the greatest warmth of passion, in the depth of misery, in the utmost fervour of exhortation, her characters use language never stilted, or exaggerated, or bombastic; yet it is always such as rises to the lips under the overmastering power of deep emotion,—penetrated as it were with the feeling of the moment. Even her historical novels—a style of writing in which the temptation to make people talk ridiculously seems all-powerful—are free from this fault. In her pages we meet with none of the "Odd-Zookses" and "By nine Halidomes," and other wonderful ejaculations, which startle us in Sir Walter Scott himself.

Descriptions of scenery in novels are often, we suspect, passed over by the ordinary reader. Such of George Eliot's readers as follow this general custom deprive themselves of a keen pleasure. Her descriptions are rich and vivid in an unusual degree. True, they are all in a certain style. As her characters are taken, for the most part, from the lower classes of society, so her descriptions are of what may be called the humbler kinds of scenery. She is an artist rather of the Dutch school. The mightier wonders of nature, the grandeur of the hills, the majesty and mystery of the sea, are not brought down to us; but nature in her lowlier and gentler aspects never was sketched with a firmer hand, or made beautiful with a colouring so rich. She is perfectly at home with English rural life, and, at her will, ordinary English scenery rises before our eyes bright

with an unexpected beauty. The power of appealing which lies in the commonest features of natural scenery has rarely been interpreted with such subtlety and truth. The mill on the banks of the sluggish river gliding among the osiers, the farmhouse hid amid the apple-blossoms, the farmyard blithe with industry, and the heavy wagons bringing plenty from a-field; the labors of the reapers among the splendours of an English autumn, the ingathering of the harvest—such are the scenes where her genius for description finds its most perfect triumph. "Loamshire," in a word, is altogether her own domain. Fresh in the recollection of every one is that wonderful effort of descriptive power with which *Felix Holt* opens—how the coach rolled through a land where

"the bushy hedgerows wasted the land with their straggling beauty, shrouded the grassy borders of the pastures with cat-kined hazels, and tossed their long blackberry branches on the cornfields. Perhaps they were white with May, or starred with pale pink dog-roses; perhaps the urchins were already nutting amongst them, or gathering the plenteous crabs. It was worth the journey only to see those hedgerows, the liberal homes of unmarketable beauty—of the purple-blossomed ruby-berried nightshade, of the wild convolvulus climbing and spreading in tendrilled strength till it made a great curtain of pale-green hearts and white trumpets, of the many-tubed honeysuckle which, in its most delicate fragrance, hid a charm more subtle and penetrating than beauty. Even if it were winter the hedgerows showed their coral, the scarlet haws, the deep-crimson hips, with lingering brown leaves to make a resting-place for the jewels of the hour-frost. Such hedgerows were often as tall as the labourers' cottages dotted along the lanes, or clustered into a small hamlet, their little dingy windows telling, like thick-filmed eyes, of nothing but the darkness within."

Of the same stamp is the following passage, in which a peculiarly English scene is painted with a loving elaboration and surprising fidelity. It is from the *Scenes of Clerical Life*, and readers will gladly excuse the frequency of our quotations when we can bring again before them writing like this:—

"No wonder Mr. Jerome was tempted to linger in the garden, for though the house was pretty and well deserved its name—'the White House,' the tall damask roses that clustered over the porch being thrown into relief by rough stucco of the most brilliant white, yet the garden and orchards were Mr. Jerome's glory, as well they might be; and there was nothing in which he had a more innocent pride—peace to a good man's memory! all his pride was innocent—than in conducting a hitherto uninitiated visitor over his grounds, and making him, in some degree, aware of the

incomparable advantages possessed by the inhabitants of the White House in the matter of red-streaked apples, russets, northern greens (excellent for baking), swan-egg pears, and early vegetables, to say nothing of flowering 'shrubs,' pink hawthorns, lavender bushes more than ever Mrs. Jerome could use, and, in short, a superabundance of everything that a person retired from business could desire to possess himself or to share with his friends. The garden was one of those old-fashioned paradises which hardly exist any longer except as memories of our childhood: no financial separation between flower and kitchen garden there: no monotony of enjoyment for one sense to the exclusion of another; but a charming paradisaical mingling of all that was pleasant to the eyes and good for food. The rich flower-border running along every walk, with its endless succession of spring-flowers, anemones, auriculas, wall-flowers, sweet-williams, campanulas, snapdragons, and tiger-lilies, had its taller beauties, such as moss and Provence roses, varied with espalier apple-trees: the crimson of a carnation was carried out in the lurking crimson of the neighbouring strawberry-beds; you gathered a mossrose one moment and a bunch of currants the next; you were in a delicious fluctuation between the scent of jasmine and the juice of gooseberries. Then what a high wall at one end, flanked by a summer-house so lofty, that after ascending its long flight of steps you could see perfectly well there was no view worth looking at; what alcoves and garden-seats in all directions; and along one side, what a hedge, tall and firm, and unbroken, like a green wall!"

Without doubt, however, George Eliot's great point as a novelist is in her characters. On whatever scores they may be objected to, there can be no dispute as to the fact that they are powerfully and vigorously drawn. She has a curious familiarity with certain out-of-the-way forms of clerical life, both in the Church and among Dissenters. Perhaps the most subtle and most delicately drawn of all her characters are the Rev. Amos Barton in *Scenes of Clerical Life*, and the Rev. Rufus Lyon in *Felix Holt*. The former of these is an interesting, even a romantic character; the latter is not in the least so; but they are to be classed together because they are both types of a class, and because of the truth with which their whole natures are shown to us. Again, how admirably done are Mr. Tryan in "Janet's Repentance," in the extreme evangelical school, and the dignified rector of the old school in *Felix Holt*,—than whom no two characters could be more distinct; and then Mr. Irwine in *Adam Bede*, a sort of mean between the two, is finely discriminated from either. Her clerical gallery is very large; and in it she has exhibited not only her wide and generous sympathies, but also that rare quality

in a novelist, the power of distinguishing characters not stamped by any marked peculiarities. The Dodson family in *The Mill on the Floss* has, we think, been much overpraised. It is a picture of harsh and vulgar, if not of positively low life, unredeemed, so far as we can see, by any delicacy of touch. There is in it no display of that power of delicate discrimination of character which we have just spoken of; on the contrary, each sister rides her own hobby with an obtrusive consistency which is carried quite to an extreme. Nor are any of the hobbies in the least amusing. Aunt Glegg always coarsely insolent about money, and Aunt Pullet always maundering about her china and her linen, seem to us not humorous, or even farcical. In fact, we think this group forms a striking contrast to the delicacy of all her clerical portraits. She has certainly achieved her greatest triumphs with parsons and artisans. Her minor characters are uniformly good. She resembles in this a careful actor who studies his by-play. She spares no pains that every part, however slight, should be thoroughly drawn. This is especially noticeable in *Felix Holt*, in which the stage is fuller than in any of her previous novels. The valet Christian, the waiting-maid Denner, the Debarrys, father and son—every one of these is a careful and completed study. In nothing, not even in intellectual power, does George Eliot rise so superior to the ordinary novelists of the day as in the perfect finish which she bestows on all her work.

We have already noticed George Eliot's love of commenting on the motives and actions of her characters, or at least of indulging in reflections directly arising out of them. She acts herself the part of chorus, showing us how and why things go wrong, and improving the occasion generally, all in a style somewhat more explicit than that of the chorons of old time. In the hands of most writers this would become tedious; it is not so in her hands. On the contrary, as is the case with Thackeray, though these comments may detract from the animation of the story, they give breadth and power to the whole work.

A critic, in the last number of *Macmillan's Magazine*, dwells on this characteristic of George Eliot's writings. He upholds it as a rare excellence, and says that only in virtue of it can novels yield us what they ought to yield, namely, "criticism of life." This may be true; but the writer speaks of the scope and power of George Eliot's "moral reflections" in language which partakes of that exaggeration of praise with which the majority of our critics are doing their best to

spoil a great writer. He selects the following "specimen reflection" as especially marvellous:—

"Our lives make a moral tradition for our individual selves, as the life of mankind at large makes a moral tradition for the race, and to have once acted greatly seems a reason why we should always be noble. But Tito was feeling the effect of an opposite tradition: he had won no memories of self-conquest and perfect faithfulness from which he could have a sense of falling."

Beside this may be placed the following in the same style:—

"And it has been well believed through many ages that the beginning of compunction is the beginning of a new life; that the mind which sees itself blameless may be called dead in trespasses—in trespasses on the love of others, in trespasses on their weaknesses, in trespasses on all those great claims which are the image of our own need."

We quote these passages, both because of the over-praise we have alluded to, and because they serve to illustrate the power of George Eliot's style. There is nothing in either of them very new or striking. The thought in the former is merely that action, of whatever kind it be, reacts upon a man's nature; and the thought in the latter is merely that very self-satisfied people are apt to be uncharitable. Thackeray would have put them both in two lines. But that is not George Eliot's way. She uses her splendid diction to give dignity to the thought. There is a pomp and stateliness about the above sentences which prevents the reader from discovering that he has heard the same thing a hundred times before. Carried away by the sounding words, he is at once impressed with the profundity of a reflection in which, if translated into homely language, he would recognise a very old friend. We are far from making this matter of reproach against George Eliot. If not in the very highest or purest style of art, it is at least a perfectly justifiable device. George Eliot is rarely gifted with a commanding eloquence, and no writer could be expected to relinquish the power which such a gift confers. And if at times she presses it a little too far, no one would be hasty to judge her. Only, when the thing is forced upon our notice, it is right to distinguish between depth of thought and force of expression.

We have before remarked on George Eliot's tendency towards improbable incident. To the same cause—namely, an inability to work out a plot—may be ascribed the unnaturalness of action which sometimes alienates our sympathy from her best char-

acters. Their proceedings are dictated by motives so utterly inadequate that we have no feeling for them, or with them, in what they do. This fault—as indeed most of the faults in art which can be brought against her—is conspicuous in *Felix Holt*, and for the plain reason that, in *Felix Holt*, she has made her most elaborate endeavour after artistic completeness. Almost all the leading characters in that book act unnaturally, and the finish-off is a climax of absurdity. No woman in Esther's position, and with Esther's feelings, would have gone to visit the Transomes. Delicacy, not less than common sense, would have made such a step impossible. It is impossible to measure the force of a woman's love; but very few, we think, would throw away a fortune justly her own, in order to gratify a wild and irrational caprice on the part of a lover, to whose faults, moreover, she is by no means blind. Certainly no woman of Esther's temperament would have done so, and therefore we feel instinctively that the result will be a dismal failure. Esther, with a large family living on £100 a year, we feel to be an utter blunder. In taking the absurd step she does, she has been false to her own character, and nothing but unhappiness to herself and her husband can ensue. And what can be said of Harold Transome's position at the close of the book? He is represented as living on quite happily and contentedly in the possession of wealth not his own; nay, worse than that, which he knows to be the property of a woman whom he has deliberately made love to for the sake of this wealth, and who has refused him. It is not worth while to point out that Harold's powerful and hard character renders this peculiarly impossible to him; no man could stoop to such a life. We can recall few things in fiction more unnatural or absurd. But all absurdities are as nothing compared with the absurdities of Felix Holt himself. One can imagine Esther giving up a fortune for love of him; but why should he have demanded this sacrifice? From what motive did his resolution to refuse riches spring? All men can sympathize with a St. Francis accepting poverty as his Heaven-destined bride; but what affinity has the foolish petulance of Felix Holt with such emotions as those which moved the saint of Assisi? A reviewer in the *Westminster* says, that if George Eliot's doctrine as to this choice of her hero is to be taken in its ordinary meaning, it is "simply mischievous." We believe it is intended so to be taken; and we agree with the reviewer in thinking that, if it shall ever have any effect, such effect can be for mischief only. As a matter of fact, it will, of course, have no effect

whatever; but this unnatural folly is a serious blemish. There is no adequate motive for such a proceeding, and therefore the book is, so far, unnatural. The man who commits this extravagance is, inferentially at least, praised and honoured for it, and therefore a false standard of right and wrong is to this extent inculcated. Many instances of a similar nature might be given from George Eliot's novels, but this one is perhaps the most marked; and at all events it is quite sufficient to illustrate our criticism.

Thus far we have considered George Eliot's powers as a writer generally, and especially her powers as a writer of fiction. But her ardent admirers put forth claims on her behalf far beyond this scope. They insist that she should be looked upon as the teacher of the age; and that in the sense in which all the supreme writers of fiction, whether in prose or verse, may be said to be teachers. Now, taking this point of view, the first question which occurs is, whether she is in her fitting pulpit?—or, in other words, Has the novel-writer any title to higher aims than the amusement of readers? Sydney Smith expresses a pretty clear opinion on the point: "The main question as to a novel is—did it amuse? Were you surprised at dinner coming so soon? Did you mistake eleven for ten, and twelve for eleven? Were you too late to dress? and did you sit up beyond the usual hour? If a novel produces these effects, it is good; if it does not—story, language, love, scandal itself cannot save it. *It is only meant to please*: and it must do that, or it does nothing." But this doctrine, especially the last sentence, is too extreme for the present day. We are, as we so often hear, an "earnest" generation; and crave for instruction at all seasons, and in divers places. Admirers of Carlyle will remember how strongly he objects on this score to the *Waverley Novels*: "Not profitable for doctrine, for reproof, for edification, for building up or elevating in any shape! The sick heart will find no healing here, the darkly struggling heart no guidance; the heroic, that is in all men, no divine awakening voice." We cannot now discuss the truth of this charge; we refer to it merely as showing that such high themes are now demanded from novelists. It is not meant that our novels are to be sermons in disguise, even though the disguise be worn with the grace of Miss Edgeworth. But it is meant that trivial aims and light emotions are sufficing motives in no work of fiction; that novels which hope to last should rest upon the permanent interests of mankind, and reach the depths of the heart. Literature has higher purposes than that of

merely amusing; and if such purposes belong to the dramatist, why not to the novelist likewise? And especially at the present time, when novel-writing, like the rod of Moses, has swallowed up almost every other form of literature.

Adopting, then, this point of view, and granting to George Eliot the appropriateness of her position as a teacher and moral instructor, the question remains, What is the purport of her teaching? or, in other words, What subjects does she touch upon, and how does she handle them? Foremost, and most striking of all, is her treatment of religion. She does not go out of her way to seek this subject, but when it does occur, she treats it freely, with knowledge and experience, and with perfect frankness. The following quotation reminds one of the "Northern Farmer":—

"I don't understand these new sort o' doctrines. When Mr. Barton comes to see me, he talks about nothing but my sins and my need o' mercy. Now, Mr. Hackit, I've never been a sinner. From the first beginning, when I went into service, I al'ys did my duty by my employers. I was as good a wife as any's in the county—never aggravated my husband. The cheese-factor used to say my cheese was al'ys to be depended on. I've known women, as their cheeses swelled a shame to be seen, when their husbands had counted on the cheese-money to make up their rent; and yet they'd three gowns to my one. If I'm not to be saved, I know a many as are in a bad way. But it's well for me as I can't go to church any longer, for if th' old singers are to be done away with, there 'll be nothing left as it was in Mr. Pattem's time; and what's more, I hear you've settled to pull the church down and build it up new?"

Equally natural, yet entirely different in feeling, is this:—

"Mrs. Raynor had been reading about the lost sheep, and the joy there is in heaven over the sinner that repenteth. Surely the eternal love she believed in through all the sadness of her lot would not leave her child to wander farther and farther into the wilderness till there was no turning—the child so lovely, so pitiful to others, so good, till she was goaded into sin by woman's bitterest sorrows! Mrs. Raynor had her faith and her spiritual comforts, though she was not in the least evangelical, and knew nothing of doctrinal zeal. I fear most of Mr. Tryan's hearers would have considered her destitute of saving knowledge, and I am quite sure she had no well-defined views on justification. Nevertheless, she read her Bible a great deal, and thought she found divine lessons there—how to bear the cross meekly, and be merciful. Let us hope that there is a saving ignorance, and that Mrs. Raynor was justified without knowing exactly how."

And then compare with these as in a loftier vein of thought :—

"His mind was destitute of that dread which has been erroneously decried as if it were nothing higher than a man's animal care for his own skin: that awe of the Divine Nemesis which was felt by religious pagans, and, though it took a more positive form under Christianity, is still felt by the mass of mankind simply as a vague fear at anything which is called wrong-doing. Such terror of the unseen is so far above mere sensual cowardice that it will annihilate that cowardice: it is the initial recognition of a moral law restraining desire, and checks the hard bold scrutiny of imperfect thought into obligations which can never be proved to have any sanctity in the absence of feeling."

"Nevertheless, Evangelicalism had brought into palpable existence and operation in Milby society that idea of duty, that recognition of something to be lived for beyond the mere satisfaction of self, which is to the moral life what the addition of a great central ganglion is to animal life. No man can begin to mould himself on a faith or an idea without rising to a higher order of experience: a principle of subordination, of self-mastery, has been introduced into his nature; he is no longer a mere bundle of impressions, desires, and impulses. Whatever might be the weaknesses of the ladies who pruned the luxuriance of their lace and ribbons, cut out garments for the poor, distributed tracts, quoted Scripture, and defined the true gospel, they had learned this—that there was a divine work to be done in life, a rule of goodness higher than the opinion of their neighbours; and if the notion of a heaven in reserve for themselves was a little too prominent, yet the theory of fitness for that heaven consisted in purity of heart, in Christlike compassion, in the subduing of selfish desires. They might give the name of piety to much that was only puritanic egoism; they might call many things sin that were not sin; but they had at least the feeling that sin was to be avoided and resisted, and colour-blindness, which may mistake drab for scarlet, is better than total blindness which sees no distinction of colour at all. Miss Rebecca Linnet, in quiet attire, with a somewhat excessive solemnity of countenance, teaching at the Sunday school, visiting the poor, and striving after a standard of purity and goodness, had surely more moral loveliness than in those flaunting peony-days, when she had no other model than the costumes of the heroines in the circulating library. Miss Eliza Pratt, listening in rapt attention to Mr. Tryan's evening lecture, no doubt found evangelical channels for vanity and egoism; but she was clearly in moral advance of Miss Phipps giggling under her feathers at old Mr. Crewe's peculiarities of enunciation. And even elderly fathers and mothers, with minds, like Mrs. Linnet's, too tough to imbibe much doctrine, were the better for having their hearts inclined towards the new preacher as a messenger from God. They became ashamed, perhaps, of their evil tempers, ashamed of their worldiness,

ashamed of their trivial, futile past. The first condition of human goodness is something to love; the second, something to reverence. And this latter precious gift was brought to Milby by Mr. Tryan and Evangelicalism."

This knowledge of the various forms of religious feeling to be found in the heart of man, and this sympathy with them all, enhance greatly the power of George Eliot's writings. It would be well if such knowledge and sympathy were possessed in the same measure by our professed religious teachers. This present age is in no real sense of the word sceptical, yet we suspect there has seldom been a time in which there was a greater gulf fixed between the clergy and the educated laity. Our clerical dignitaries are startled now and again by some outspoken heresy; they would be a good deal more startled were they made aware how much of what they call heresy is unspoken, merely because it has become an ordinary habit of thought. They are absorbed in their noisy contests—believing sincerely that matters of vital import are at stake; unconscious that the great bulk of the laity looks on with indifference, nay with contempt, save when indignation is roused by some act of clerical intolerance more heinous than common, yet also with a feeling of sorrowful regret, that between them and their teachers there is no sympathy, that to their teachers they can look for no guidance. It is full time the clergy should look to it, when laymen find more that is akin to their modes of thought on religious subjects in the writings of novelists like Thackeray or George Eliot, than in all the teaching of all the churches. In this particular, George Eliot's subtlety, liberality, sympathy with mankind, and fervour of feeling, deserve the heartiest recognition. Few can hope to rival her powers; but all might seek to imitate the spirit in which she approaches these themes.

When any question of morality arises, George Eliot's tone is not less lofty than in treating of matters more peculiarly religious. Her point of view is always pure and high-minded. Her comments and criticisms, either upon the actual transactions of the tale, or upon life generally, are penetrated with a striking nobility of sentiment. But the case is different with her characters in action. Her precepts may be admirable; her example is not so. We hardly know how to account for this; but the same thing is remarkable in other writers, as, for example, in Dickens, with whom the disposition to high-flown sentiment is strong. When this sentiment comes into harsh collision with the facts of life, unnaturalness, it may



be immorality of action, is the frequent result. George Eliot cannot be called a sentimental writer; but in her hands high moral theories applied to ordinary realities lead to similar results. Perhaps the sentiment in the one case, the moral doctrine in the other, may be too bright and good for human nature's daily food, and therefore prove at the critical moment an insufficient power; but however this may be, neither of them necessarily, nor even commonly, is associated with rectitude of conduct.

Whatever may be the explanation, the fact is certain. It is not too much to say that George Eliot's characters rarely or never act from principle. They are actuated sometimes by real and fervent religious feeling, often by noble and lofty sentiment; but principle, in the proper sense of the word, very seldom has power over them. The existence of such a motive is forgotten in her psychology. The only instance we can remember of any of her characters acting from rational conviction is when Romola, persuaded by the exhortation of Savonarola, gives up her intention of flying from her husband's home. This refusal to recognise principle as a cause of action is common enough among women, both in their walk and conversation, and (in the case of such of them as are authors) in their writings. Miss Yonge is a striking instance of it. But a more masculine power of thought might have been expected from George Eliot.

Much in the same way there is in her writings a noticeable disregard of the secondary principles of morality. Unless her characters are animated by the most exalted motives, they are without any influence sufficient to restrain them from serious offences. We do not, of course, mean that George Eliot has drawn no ordinary characters—influenced often by commonplace motives. What we mean is, that the principles to which we have referred are not allowed sufficient scope on the whole—that they have not their proper place among the motives which influence human action generally—that the power they have to restrain when religion is absent is not duly acknowledged. Honour, for example, the most powerful, perhaps, of those secondary principles, has no part in her drama. There is a strong instance of this in *Adam Bede*. Arthur Donnithorne is represented as a young English gentleman in the best sense of the word, thoroughly generous-hearted and honourable. And yet he seduces a girl, the niece of a farmer of the better class, whom he has known all his life, and with whose family, the principal tenants on the estate, he has all his life been on terms of condescending intimacy, as befits the

young squire. The seduction is peculiarly bad, because it is carried out by real love-making,—marriage, if not actually promised, being prominently brought before the girl's mind. When found out by Adam Bede, he takes leave of Hetty in a very cool letter, the purport of which is to assure her that the marriage which he had led her to expect could never take place. He leaves her without the smallest thought of or provision for the future, and is, when away, greatly cheered by the intelligence that she is about to marry Adam, who also had been one of the lowly friends of his youth. There are, of course, many men who would have done all this quite coolly, but Arthur Donnithorne could not. He would not, indeed, have been restrained by religion, nor by any very deep conceptions of morality, for neither one influence nor the other had much hold upon him; but he would have been restrained by a feeling of honour. The Arthur Donnithorne of the book would have felt that he was not behaving "like a gentleman," and that would have been enough to give him pause. It would have made him hasten from temptation when he saw that Hetty was dreaming of marriage, and was therefore likely to fall. But in George Eliot's treatment it is assumed that, the highest motives being absent, no lower motive could have had sufficient power. Now this is untrue to nature, and therefore makes the whole character inconsistent and unreal. The same mistake runs through all her writings. It is a mistake which would be committed by a certain order of preachers; but it rests upon an inadequate view of human nature,—leads to a false representation of life. The world would be in a very bad way were it not for the authority of those lower principles of morality which George Eliot, at any crisis of action, utterly disregards. And the extremes of wrongdoing into which her characters, inconsistently with their natures, are often hurried, arises mainly from this source. For a teacher of morality, that being the light in which we are now regarding George Eliot, thus to undervalue the influence of those principles, is a grievous blunder, and a blunder of a directly pernicious tendency.

The relations between the sexes, in one aspect or another, occupy a prominent place in all novels. The majority preserve the beaten track of falling in love, courtship under difficulties of various sorts, ending, as the case may be, in marriage, or in some untoward catastrophe. Others begin with matrimonial felicity, and seek to awaken an interest by setting forth the troubles to which that felicity may be exposed; while some avoiding matrimony altogether, narrate



a tale of vice or crime, as in *Clarissa Harlowe* or *Rosamond Gray*. George Eliot has taken up this theme in many of its aspects. With her the ordinary love-story is not very frequent, nor always successful. The loves of Esther and Felix Holt do not enlist our sympathies. We doubt the truth to nature in making a girl like Esther be subjugated by a man like Felix Holt,—clever, indeed, but coarse, overbearing, and without genius sufficient to justify his unpleasant eccentricities. Her taste must have revolted from him; while her acute intellect would have detected the pretentiousness of his nature, and the want of any sound basis for his opinions. Of the two, Harold Transome, with all his faults, has far more reality about him. Felix Holt is precisely the character a woman would create, meaning him to be very fine; but he is not the man a woman would readily fall in love with. On the other hand, nothing can be more purely beautiful than the episode of Rufus Lyon and Esther's mother; nothing more deeply true than the growth of the affection of Dinah Morris for Adam Bede. No reader can forget the scene in which the young Methodist confesses the power of an earthly love, and the author's passionate comment: "What greater thing is there for two human souls than to feel that they are joined for life,—to strengthen each other in all labor, to rest on each other in all sorrow, to minister to each other in all pain, to be one with each other in silent unspeakable memories at the last parting?"

It is matter for regret that a writer who can thus portray the beauty of romance and the purity of affection should ever have stooped to themes less lovely. But the pleasant aspect of the relations between man and woman is not that which George Eliot loves best to look upon. She dislikes those relations as at present constituted. She is the champion of woman against the selfishness and oppression of man. "God was cruel when He made woman," is the wild exclamation of one of her characters, with which the writer evidently sympathizes.

A writer animated by such a spirit naturally turns away from cheerful views. Accordingly the less fortunate of the relations between the sexes—seduction, unhappy marriage, breach of the marriage vow—are of constant occurrence in her writings. What may be the exact merits of this "teaching," we are at a loss to discover. To us it seems purely pernicious.

We do not deny that these, like any of the other crimes or calamities of life, may be proper subjects of fiction. But to make them so, they must be treated with studious

reserve and delicacy, and they must be exceptional—the results of overmastering circumstance. George Eliot fulfils neither of these conditions. So far from approaching these matters with reserve, she enters into every detail with an indecorous and unpleasant minuteness. Thus in *Adam Bede* we have an elaborate analysis of the mental process by which a silly girl is carried on to her fall. It is executed with wonderful skill; but it is neither a pleasant nor a profitable subject for meditation, and might well have been spared. But, worse than this, we have forced on us minute descriptions of the physical steps which led to the result—pictures of Hetty's pouting lips and swimming eyes, of the two wandering together in the wood, etc., for all of which we can imagine no defence. Attentive readers will remember the suggestive introduction, at a later part of the book, of a pink silk neckerchief—a touch which would have done credit to any French novelist. It is disagreeable to recall these things; but censure, especially on such a ground as this, must be justified. And this style of writing seems to us deserving of the severest censure. It is not, indeed, openly indecent; but it is not the less evil because it is suggestive only. For ourselves we think it but the worse on that account, and of the two prefer the frank coarseness of such scenes as the adventure of Tom Jones with Lady Bellaston. How differently is the same theme handled in *The Heart of Midlothian*!—our feelings and sympathies far more strongly stirred, and yet not an allusion which can offend good taste. Elsewhere in George Eliot's writings, especially in the third volume of *The Mill on the Floss*, there is a certain tone of sensuality, less disagreeable than the suggestive style, but still quite unworthy of her:—

"'O may I get this rose?' said Maggie, making a great effort to say something, and dissipate the burning sense of irretrievable confession. 'I think I am quite wicked with roses—I like to gather them and smell them till they have no scent left.'"

"Stephen was mute; he was incapable of putting a sentence together, and Maggie bent her arm a little upward towards the large half-opened rose that had attracted her. Who has not felt the beauty of a woman's arm?—the unspeakable suggestions of tenderness that lie in the dimpled elbow and all the varied gently-lessening curves down to the delicate wrist, with its tiniest, almost imperceptible nicks in the firm softness. A woman's arm touched the soul of a great sculptor two thousand years ago, so that he wrought an image of it for the Parthenon which moves us still as it clasps lovingly the time-worn marble of a headless trunk. Maggie's was such an arm as that—and it had the warm tints of life.

"A mad impulse seized on Stephen; he darted towards the arm, and showered kisses on it, claspings the wrist."

Readers of *Guy Livingstone* will remember a scene, also in a conservatory, a fitting companion to the above, in which that ruffianly hero breaks out in the same style—though, to be sure, *he* is provided with the excuse of being drunk. Why should genius like that of George Eliot stoop to the lowest level of the author of *The Sword and the Gown*?

Perhaps even worse than this treatment of these matters, is the way in which they are introduced. They are not represented as exceptional, or as the result of extraordinary circumstances; they are brought before us almost as things of course. We have already alluded to Arthur Donnithorne and Hester Sorrell. Another instance of what we mean is to be found in "Janet's Repentance." There Mr. Tryan tells how, in the days of "dissipation" at Oxford, he "took a girl away from her home;" and he tells it as no out-of-the-way occurrence. Now, such an occurrence in real life would be very much out of the way. Seduction of women in that rank by men in that rank, is, in spite of all that sentimental writers say, a very uncommon thing. Of course it does happen; but it is rare, and to represent it as an ordinary event is false in art and wrong in morals. A more flagrant instance still is the conduct of Mrs. Transome in *Felix Holt*. A woman of high birth, occupying a good position, and raised above low temptation both by culture and natural ability, is there represented as having stooped to a country attorney—a coarse vulgar man, wearing "black satin waistcoats," with "fat white hands," and a "scented handkerchief." That he was a brute as well, who would make money out of this connexion, and enrich himself by keeping her in comparative poverty, a woman like Mrs. Transome would have foreseen from the first. And this is suddenly opened upon the reader without any attempt to account for it,—as in the ordinary course of life, as a thing likely to happen any day in the society around us. There is no surprise expressed about it; no sense of degradation indicated; nothing like repentance or regret for the sin itself; the only feeling aroused is shame at being found out. The fact that punishment follows does not at all redeem the immorality of such treatment. No one is moved by this; for the smallest experience of life shows that the punishment of wrong-doing, here at least, is a mere accident—sometimes utterly disproportioned to the offence, often never coming at all. The

morality of a representation of vice or crime is determined by the circumstances in which the act is done, and the motives which animate the actors; it is not at all affected by whether or not retribution is brought in at the last.

No one would object to the charity which pervades George Eliot's writings. Her wide sympathies, and the generosity with which she appreciates the good in things evil, are great sources of her power, and command hearty admiration. But these qualities are very different from a tendency to make evil prevail over good; and *that* is what we are forced to urge against her. To represent men and women as immaculate would be childish; to make some almost uniformly good, and others invariably evil, would be unnatural; but, on the other hand, to show noble natures yielding to temptations unworthy of them, or influenced by motives over which they should have easy command, is to make light of the distinction between right and wrong, to make the downward path appear more headlong even than it really is, and thus, while to excuse error, also to discourage effort. It is terribly true that circumstances go far to shape character; but a moralist should take good heed not to give them more power than they really have, and especially not to exaggerate the power of trivial circumstances.

Another, and a less painful example, of how George Eliot makes a fine nature act, as it were, below itself, is to be found in *The Mill on the Floss*. Every one remembers the noble creation of Maggie Tulliver: "a creature full of eager, passionate longings for all that was beautiful and good; thirsty for knowledge; with an ear straining after dreamy music that died away and would not come near to her; with a blind unconscious yearning for something that would link together the wonderful impressions of this mysterious life, and give her soul a sense of home in it." Her childhood was happy, but her youth was one of hardship and self-discipline. Under these influences, she meets, in early womanhood, Mr. Stephen Guest, "a large-headed, long-limbed young man," with "a diamond ring, attar of roses, and an air of nonchalant leisure, at twelve o'clock in the day;" and after *one* interview with him, in which he neither does nor says anything remarkable, she "shivers" at the notice of his marrying anybody but herself. The next step is his singing to her, and the result of that George Eliot must tell herself:—

"Maggie always tried in vain to go on with her work when music began. She tried harder than ever to-day; for the thought that Stephen

knew how much she cared for his singing was one that no longer roused a merely playful resistance; and she knew, too, that it was his habit always to stand so that he could look at her. But it was of no use: she soon threw her work down, and all her intentions were lost in the vague state of emotion produced by the inspiring duet—emotion that seemed to make her at once strong and weak: strong for all enjoyment, weak for all resistance. When the strain passed into the minor, she half-started from her seat with the sudden thrill of that change. Poor Maggie! She looked very beautiful *when her soul was being played on in this way by the inexorable power of sound*. You might have seen the slightest perceptible quivering through her whole frame, as she leaned a little forward, clasping her hands as if to steady herself; while her eyes dilated and brightened into that wide-open, childlike expression of wondering delight, which always came back in her happiest moments.

"Stephen rolled out, with sancy energy—

"Shall I, waiting in despair,  
Die because a woman's fair?"

and seemed to make all the air in the room alive with a new influence. Lucy, always proud with what Stephen did, went towards the piano with laughing admiring looks at him; and Maggie, in spite of her resistance to the spirit of the song and to the singer, *was taken hold of and shaken by the invisible influence—was borne along by a wave too strong for her.*"

Shortly after this astonishing musical effect a dancing-party takes place at which he speaks to her "with that glance and tone of subdued tenderness which young dreams create to themselves in the summer woods when low cooing voices fill the air"—whatever that may mean; and at the same entertainment there occurs the scene in the conservatory, which we have before quoted. After this there is but one more interview, and then comes the climax:—

"He was looking into her deep, deep eyes—far-off and mysterious as the starlit blackness, and yet very near, and timidly loving. Maggie sat perfectly still—perhaps for moments, perhaps for minutes—until the helpless trembling had ceased, and there was a warm glow on her cheek.

"The man is waiting—he has taken the cushions," she said. 'Will you go and tell him?'

"What shall I tell him?' said Stephen, almost in a whisper. He was looking at the lips now.

"Maggie made no answer.

"Let us go," Stephen murmured, entreatingly, rising, and taking her hand to raise her too. 'We shall not be long together.'

"And they went. Maggie felt that she was being led down the garden among the roses, being helped with firm tender care into the boat, having the cushion and cloak arranged for her

feet, and her parasol opened for her (which she had forgotten)—all by this stronger presence that seemed to bear her along without any act of her own will, like the added self which comes with the sudden exalting influence of a strong tonic—and she felt nothing else. Memory was excluded."

"They glided rapidly along, Stephen rowing, help by the backward flowing tide, past the Tofton trees and houses—on between the silent sunny fields and pastures, which seemed filled with a natural joy that had no reproach for theirs. The breath of the young, unwearied day, the delicious rhythmic dip of the oars, the fragmentary song of a passing bird heard now and then, as if it were only the overflowing of brimful gladness, the sweet solitude of a twofold consciousness that was mingled into one by that grave nuturing gaze which need not be averted—what else could there be in their minds for the first hour? Some low, subdued, languid exclamation of love came from Stephen from time to time, as he went on rowing idly, half automatically: otherwise, they spoke no word; for what could words have been but an inlet to thought? and thought did not belong to that enchanted haze in which they were enveloped—-it belonged to the past and the future that lay outside the haze."

The author has laboured to throw a halo of romance round this story; but even her genius cannot hide its innate absurdity. Under ordinary circumstances, a woman such as Maggie Tulliver would not have been likely to fall in love with a man like Stephen Guest. But when to do so implied a violation of all propriety, and even decency, our sympathies are repelled by the inadequacy of the influences which led to such an act. Many women might have been hurried into this wrong-doing even by the vulgar fascinations of Stephen Guest; but not Maggie Tulliver. Her passionate and unruly nature might have yielded under other conditions, but not to him. She never could have dreamed that *he* would gratify her "thirst for all knowledge," or would "give her soul a sense of home in this mysterious life." He can make no appeal to her intellect or her imagination, to her higher nature in any way; he does nothing but sing to her and row her about in a boat. Second-rate music; and what George Eliot calls the "rhythmic movement of the oars," or, when the agony deepens, "the delicious rhythmic dip of the oars;" roses, cooing-voices, cushions, parasols timeously opened,—such are the influences which have power to silence gratitude and honour in a nature like that of Maggie Tulliver, and before their irresistible charm she becomes "lost to life and use and name and fame!" When they are not at the piano or on the river, they are wandering among roses "in a dim, dreamy state," or

"under the drooping green of laburnums." In all George Eliot's tales, the passion of love is presented too exclusively in its physical aspect. Romola herself is at once overpowered by the attraction of a comely face. But in *The Mill on the Floss* the love-making is altogether through the senses. Even the sentimentalism of Bulwer is better than this. His Godolphins and Maltraverses make some effort to appeal to the mind.

*The Mill on the Floss* abounds with instances of George Eliot's failure to hit the true note of connexion between circumstances and conduct. Maggie Tulliver yields in the first instance without even a struggle. We are told indeed that her struggles are terrible, but she never *does* anything to assist her efforts. Then again her refusal to marry Stephen, after the whole mischief is done by her running or rather rowing off with him, is a strong example of the false morality to be met with in George Eliot's works. There is no reason for this resolution; every consideration of what is due to herself as well as to others is the other way. It springs merely from irrational impulse. She shows just as much want of self-control after the elopement as she did before it—forgets what she owes to her own reputation and the reputation of her family, not less than she forgot what she owed to the feelings of her cousin. There may be great selfishness in self-sacrifice. The true lesson would have been to make her bear the natural consequences of her conduct, showing how the fact of being compelled to secure her own gratification itself formed part of her punishment; to elevate a selfish and unavailing renunciation into a sort of martyrdom is altogether false teaching. People can never really redeem error by acting like fools.

It would not be difficult to show in George Eliot's writings traces of faults very prevalent among writers of a lower grade. But the limits of our space forbid this, and we gladly spare ourselves the ungrateful task. It would be no pleasure to mark in her the germs of the unnaturalness and extravagance of Miss Braddon, or of the ridiculous sensuality which disgusts us in the pages of *Ouida*. It is right, moreover, to observe that from the more serious blemishes we have indicated her earlier writings are exempt. The *Scenes of Clerical Life* are sorrowful pictures indeed, but they are true to nature and free from any taint of impurity. In the delicacy and beauty of Mrs. Gilfil's love-story we think her genius has achieved its most perfect triumph. *Romola*, deficient in interest as a story, is truly noble in tone. There is no reason, therefore, to suppose that the graver faults on which we

have dwelt so long, cannot be laid aside at will. Deficiency in constructive power would seem to make George Eliot's entire success as a novelist doubtful, but this is a slight drawback. She has it easily within her reach to win no passing reputation, and gain, with general consent, a place among the classics of the English language, and she owes it to her rare genius to consider well, whether some sobriety in incident, a closer truth to nature, a greater respect for ordinary morality, would not aid her in the achievement of this great ambition.

#### ART. VIII.—KEMBLE AND "THE CHRISTIAN YEAR."

THE closing chapter of Lockhart's *Life of Scott* begins with these words: "We read in Solomon, 'The heart knoweth its own bitterness, and a stranger doth not intermeddle with his own joy;' and a wise poet of our own time thus beautifully expands the saying—

'Why should we faint and fear to live alone,  
Since all alone, so Heaven has willed, we die,  
Nor even the tenderest heart, and next our  
own  
Knows half the reasons why we smile or  
sigh.'"

On glancing to the footnote to see who the wise poet of our own time might be, the reader saw the name of *Kemble and The Christian Year*. To many in Scotland this was the earliest intimation of the existence of the poet, and the work that has immortalized him. On obtaining a copy of *The Christian Year*, and studying it, readers could not but be struck by a lyric here and there, which opened a new vein, and struck a note of meditative feeling, not like anything they had heard before. But the little book contained much that was strange and unintelligible, some things even startling. Very vague were the rumors which at that time reached Scotland of the author. Men said he belonged to a party of Churchmen who were making a great stir in Oxford, and leavening the University with a kind of thought which was novel, and supposed to be dangerous. The most definite thing said was that the new school had a general Romanizing tendency. But this must be a mistake or strange exaggeration. Folly and sentimentalism might no doubt be for a time in vogue at Oxford. But as for Romanism, the revival of such antiquated nonsense was

simply impossible in this enlightened nineteenth century. Such was the kind of talk that went on when Scott's *Life* appeared in 1838. For more exact information, young men who were inquisitive had to wait, till a few years later gave them opportunities of seeing for themselves, and coming into personal contact with what was actually going on in Oxford.

It was a strange experience, for a young man trained anywhere, much more for one born and bred in Scotland, and trained within The Kirk, to enter Oxford when the religious movement was at its height. He found himself all at once in the midst of a system of teaching which unchurched himself and all whom he had hitherto known. In his simplicity he had believed that spiritual religion was a thing of the heart, and that neither Episcopacy or Presbytery avail anything. But here were men,—able, learned, devout-minded men,—maintaining that outward rites and ceremonies were of the very essence, and that, where these were not, there was no true Christianity. How could men, such as these were reported to be, really go back themselves and try to lead others back to what were but the beggarly elements? It was all very perplexing, not to say irritating. However, there might be something more behind which a young man could not understand. So he would wait and see what he would see. Soon he came to know that the only portions of Oxford society, unaffected by the new influence, were the two extremes. The older dons, that is, the heads of houses, and the senior tutors, were unmoved by it, except to opposition. The whole younger half of the undergraduates generally took no part in it. But the great body that lay between these extremes, that is, most of the younger fellows of colleges, and most of the scholars and elder undergraduates, at least those of them who read or thought at all, were in some way or other busy with the new questions. When in time the new-comer came to know some of the men who sympathized with the movement, the first impression was of something constrained and artificial in their manners and deportment. High character and ability many of them were said to have; but to a chance observer it seemed that, in as far as their system had moulded them, it had made them the opposite of natural in their views of things, and in their whole mental attitude. You almost longed for some free breath of mountain air to sweep away the stifling atmosphere that was about you. This might come partly, no doubt, from the feeling with which you knew that these men must from their system regard you, and all who had the

misfortune to be born outside of their sacred pale. Not that they ever expressed such views in your hearing. Good manners, as well as their habitual reserve, forbade this. But, though they did not say it, you knew quite well what they felt. And if at any time the "young barbarian" put a direct question, or made a remark which went straight at these opinions, they would only look at him, astonished at his rudeness and profanity, and would shrink into themselves. Now and then, however, it would happen that some adherent, or even leading man of the movement, more frank and outspoken than the rest, would deign to speak out his principles, and even to discuss them with undergraduates and controversial Scots. If to him urging the necessity of Apostolical Succession, and the sacerdotal view of the Sacraments, some young man ventured to reply—"Well! if all you say be true, then I never can have known a Christian. For up to this time I have lived among people who were strangers to all these things which, you tell me, are essentials of Christianity. And I am quite sure that, if I have never known a Christian till now, I shall never know one." To this the answer would probably be, "There is much in what you say. No doubt high virtues, very like the Christian graces, are to be found outside of the Christian Church. But it is a remarkable thing, those best acquainted with Church history tell me, that outside of the pale of the Church the saintly character is never found." This *naïve* reply was not likely to have much weight with the young listener. It would have taken something stronger to make him break faith with all that was most sacred in his early recollections. Beautiful examples of Presbyterian piety had stamped impressions on his memory not to be effaced by all the subtleties of theology or all the arguments of the schools. And the Church theory which began by disowning these examples placed a barrier to its acceptance at the very outset.

But however unbelievable their theory, further acquaintance with the younger men of the new school, whether junior fellows or undergraduate scholars, disclosed many traits of character that could not but awaken respect, or something more. If there was about many of them a constraint and reserve which seemed unnatural, there was also in many an unworldliness and self-denial, a purity of life and elevation of aim, in some a generosity of purpose and depth of devotion, not to be gainsaid. Could the movement which produced these qualities, or even attracted them to itself, be wholly false and bad? This movement, moreover, when at

its height, extended its influence far beyond the circle of those who directly adopted its views. There was not a reading man at least in Oxford, who was not more or less indirectly influenced by it. Only the very idle or the very frivolous were wholly proof against it. On all others it impressed a sobriety of conduct and seriousness not usually found among large bodies of young men. It raised the tone of average morality in Oxford to a level which perhaps it never before reached. You may call it over-wrought and too highly strung. Perhaps it was. It was better, however, for young men to be so, than to be doubters or cynics.

But if such was the general aspect of Oxford society at that time, where was the centre and soul from which so mighty a power emanated? At that time it lay, and had for some years lain, mainly in one man—a man in many ways the most remarkable that England has seen during this century, perhaps the most remarkable whom the English Church has produced in any century,—John Henry Newman.

The influence he had gained, apparently without setting himself to seek it, was something altogether unlike anything else in our time. A mysterious veneration had by degrees gathered round him, till now it was almost as though some Ambrose or Augustine of elder ages had reappeared. He himself tells how one day, when he was an undergraduate, a friend with whom he was walking in the Oxford street cried out eagerly, "There's Keble!" and with what awe he looked at him! A few years, and the same took place with regard to himself. In Oriel Lane light-hearted undergraduates would drop their voices and whisper, "There's Newman!" when, head thrust forward, and gaze fixed as though on some vision seen only by himself, with swift, noiseless step, he went by. Awe fell on them for a moment, almost as if it had been some apparition that had passed. For his inner circle of friends, many of them younger men, he was said to have a quite romantic affection, which they returned with the most ardent devotion and the intensest faith in him. But to the outer world he was a mystery. What were the qualities that inspired these feelings? There was of course learning and refinement, there was genius, not indeed of a philosopher, but of a subtle and original thinker, an unequalled edge of a dialectic, and these all glorified by the imagination of a poet. And then there was the utter unworldliness, the setting at naught of all things which men most prize, that tamelessness of soul, which was ready to essay the impossible. Men felt that here was

"One of that small transfigured band  
Whom the world cannot tame."

It was this mysteriousness which, beyond all his gifts of head and heart, so strangely fascinated and overawed,—that something about him which made it impossible to reckon his course and take his bearings, that soul-hunger and quenchless yearning which nothing short of the eternal could satisfy. This deep, resolute ardour of soul was no doubt an offence not to be forgiven by older men, especially by the wary and worldly-wise; but it was the very spell which drew to him the hearts of all the younger and the more enthusiastic. Such was the impression he had made in Oxford just before he relinquished his hold on it. And if at that time it seemed to persons at a distance extravagant and absurd, they may have since learnt enough to make it plain to them that there was that about him who was the object of it to justify the impression.

But it may be asked, what actions or definite results were there to account for so deep and widespread a veneration? Of course there were the products of his pen, his various works, controversial, theological, religious. But none of these were so deep in learning as some of Dr. Pusey's writings, nor so widely popular as *The Christian Year*; and yet both Dr. Pusey and Mr. Keble were at that time quite second in importance to Mr. Newman. The centre from which his power went forth was the pulpit of St. Mary's, with those wonderful afternoon sermons. Sunday after Sunday, year by year, they went on, each continuing and deepening the impression made by the last. As the hour interfered with the dinner-hour of the colleges, most men preferred a warm dinner without Newman's sermon to a cold one with it, so the audience was not crowded—the large church little more than half filled. The service was very simple,—no pomp, no ritualism; for it was characteristic of the leading men of the movement that they left these things to the weaker brethren. Their thoughts, at all events, were set on great questions which touched the heart of unseen things. About the service, the most remarkable thing was the beauty, the silver intonation of Mr. Newman's voice, as he read the lessons. It seemed to bring new meaning out of the familiar words. Still lingers in memory the tone with which he read, "But Jerusalem which is above is free, which is the mother of us all." When he began to preach, a stranger was not likely to be much struck, especially if he had been accustomed to pulpit oratory of the Boanerges sort. Here



was no vehemence, no declamation, no show of elaborated argument, so that one who came prepared to hear a "great intellectual effort" was almost sure to go away disappointed. Indeed, we believe that if he had preached one of his St. Mary's sermons before a Scotch town congregation, they would have thought the preacher a "silly body." The delivery had a peculiarity which it took a new hearer some time to get over. Each separate sentence, or at least each short paragraph, was spoken rapidly, but with great clearness of intonation; and then at its close there was a pause, lasting for nearly half a minute; then another rapidly but clearly spoken sentence, followed by another pause. It took some time to get over this, but, that once done, the wonderful charm began to dawn on you. The look and bearing of the preacher were that of one who dwelt apart, who, though he knew his age well, did not live in it. From his seclusion of study, and abstinence, and prayer, from habitual dwelling in the unseen, he seemed to come forth that one day of the week to speak to others of the things he had seen and known. Those who never heard him might fancy that his sermons would generally be about apostolical succession or rights of the Church, or against Dissenters. Nothing of the kind. You might hear him preach for weeks without an allusion to these things. What there was of High Church teaching was implied rather than enforced. The local, the temporary, and the modern was ennobled by the presence of the catholic truth belonging to all ages that pervaded the whole. His power showed itself chiefly in the new and living way in which he touched old truths, moral or spiritual, which all Christians acknowledge, but most have ceased to feel—when he spoke of "Unreal Words," of "The Individuality of the Soul," of "The Invisible World," of a "Particular Providence;" or again, of "The Ventures of Faith," "Warfare the condition of Victory," "The Cross of Christ the Measure of the World," "The Church a Homo for the Lonely." As he spoke, how the old truth became new! how it came home with a meaning never felt before! He laid his finger—how gently, yet how powerfully,—on some inner place in the hearer's heart, and told him things about himself he had never known till then. Subtlest truths which it would have taken philosophers pages of circumlocution and big words to state, were dropt out by the way in a sentence or two of the most transparent Saxon. What delicacy of style yet what strength! how simple yet how suggestive! how homely yet how refined!

how penetrating yet how tender-hearted! If now and then there was a forlorn undertone which at the time seemed inexplicable, if he spoke of "many a sad secret which a man dare not tell lest he find no sympathy," of "secrets lying like cold ice upon the heart," of "some solitary incommunicable grief," you might be perplexed at the drift of what he said, but you felt all the more drawn to the speaker. To call these sermons eloquent would not be the word for them; high poems they rather were, as of an inspired singer, or the outpourings as of a prophet rapt, yet self-possessed. And the tone of voice in which they were spoken, once you grew accustomed to it, sounded like a fine strain of unearthly music. Through the stillness of that high Gothic building the words fell on the ear like the measured drippings of water in some vast dim cave. After hearing these sermons you might come away still not believing the tenets peculiar to the High Church system; but you would be harder than most men, if you did not feel more than ever ashamed of coarseness, selfishness, worldliness, if you did not feel the things of faith brought nearer to the heart.

There was one occasion of a different kind, when he spoke from St. Mary's pulpit for the last time, not as Parish minister, but as University preacher. It was the crisis of the movement. All Oxford assembled to hear what Newman had to say, and St. Mary's was crowded to the door. The subject he spoke of was "the theory of Development in Christian Doctrine," a subject since then much canvassed, but at that time new even to the ablest men in Oxford. For an hour and a half he drew out the argument, and perhaps the acutest there did not quite follow the line of thought, or felt wearied by the length of it, illustrated though it was by some startling examples. Such was the famous "Protestantism has at various times developed into Polygamy," or the still more famous "Scripture says the sun moves round the earth, Science that the earth moves, and the sun is comparatively at rest. How can we determine which of these opposite statements is true, till we know what motion is?" Few probably who heard it have forgot the tone of voice with which he uttered the beautiful passage about music as the audible embodiment of some unknown reality behind, itself coming like a strain of splendid music out of the heart of a subtle argument:—

"There are seven notes in the scale; make



them fourteen; yet what a slender outfit for so vast an enterprise! What science brings so much out of so little? Out of what poor elements does some great master create his new world! Shall we say that all this exuberant inventiveness is a mere ingenuity or trick of art, like some game or fashion of the day, without reality, without meaning? . . . Is it possible that that inexhaustible evolution and disposition of notes, so rich yet so simple, so intricate yet so regulated, so various yet so majestic, should be a mere sound which is gone and perishes? Can it be that those mysterious stirrings of heart, and keen emotions, and strange yearnings after we know not what, and awful impressions from we know not whence, should be wrought in us by what is unsubstantial, and comes and goes, and begins and ends in itself? It is not so; it cannot be. No; they have escaped from some higher sphere; they are the outpourings of eternal harmony in the medium of created sound; they are echoes from our Home; they are the voices of Angels, or the Magnificat of Saints, or the living laws of Divine governance, or the Divine attributes; something are they besides themselves, which we cannot compass, which we cannot utter, though mortal man, and he perhaps not otherwise distinguished above his fellows, has the power of eliciting them."

This was preached in the winter of 1843, the last time he appeared in the University pulpit. His parochial sermons had by this time assumed an uneasy tone which perplexed his followers with fear of change. That summer solved their doubt. In the quiet chapel of Littlemore which he himself had built, when all Oxford was absent during the long vacation, he preached his last Anglican sermon to the country people, and only a few friends, and poured forth that affecting lament and farewell to the Church of England. The sermon is entitled "The Parting of Friends." The text was "Man goeth forth to his work and his labour until the evening." He went through all the instances recorded in the Bible of human affection sorely tried, reproducing the incidents in the very words of Scripture,—Jacob, Hagar, Naomi, Jonathan and David, St. Paul and the elders of Ephesus, and last, the weeping over Jerusalem, and the "Behold, your house is left unto you desolate,"—and then he bursts forth—

"A lesson, surely, and a warning to us all, in every place where He puts His name, to the end of time, lest we be cold towards His gifts, or unbelieving towards His word, or jealous of His workings, or heartless towards His mercies. . . . O mother of saints! O school of the wise! O nurse of the heroic! of whom went forth, in whom have dwelt memorable names of old, to spread the truth abroad, or to cherish and illustrate it at home! O thou, from whom surrounding nations lit their lamps! O

virgin of Israel! wherefore dost thou now sit on the ground and keep silence, like one of the foolish women who were without oil on the coming of the Bridegroom? Where is now the ruler in Sion, and the doctor in the Temple, and the ascetic on Carmel, and the herald in the wilderness, and the preacher in the marketplace? Where are thy "effectual fervent prayers" offered in secret, and thy alms and good works coming up as a memorial before God? How is it, O once holy place, that "the land mourneth, for the corn is wasted, the new wine is dried up, the oil languisheth, because joy is withered away from the sons of men?" Alas for the day! how do the beasts groan! the herds of cattle are perplexed, because they have no pasture; yea, the flocks are made desolate. . . . O my mother, whence is this unto thee, that thou hast good things poured upon thee and canst not keep them, and bearest children, yet darest not own them! Why hast thou not the skill to use their services, nor the heart to rejoice in their love? How is it that whatever is generous in purpose, and tender or deep in devotion, thy flower and thy promise falls from thy bosom, and finds no home within thine arms? Who hath put this note upon thee, to have "a miscarrying womb, and dry breasts," to be strange to thine own flesh, and thine eye cruel to thy little ones? Thine own offspring, the fruit of thy womb, who love thee and would toil for thee, thou dost gaze upon with fear, as though a portent, or thou dost loath as an offence; at best thou dost but endure, as if they had no claim but on thy patience, self-possession, and vigilance, to be rid of them as easily as thou mayest. Thou makest them 'stand all the day idle' as the very condition of thy bearing with them; or thou biddest them begone where they will be more welcome; or thou sellest them for nought to the stranger that passes by. And what wilt thou do in the end thereof?

"Scripture is a refuge in any trouble; only let us be on our guard against seeming to use it farther than is fitting, or doing more than sheltering ourselves under its shadow. It is far higher and wider than our need, and it conceals our feelings while it gives expression to them. . . . And O my brethren, O kind and affectionate hearts, O loving friends, should you know any one whose lot it has been, by writing or by word of mouth, in some degree to help you thus to act; if he has ever told you what you knew about yourselves, or what you did not know; has read to you your wants and feelings, and comforted you by the very reading; has made you feel that there was a higher life than this daily one, and a brighter world than that you see; or encouraged you, or sobered you, or opened a way to the inquiring, or soothed the perplexed, if what he has said or done has ever made you take interest in him, and feel well-inclined towards him, remember such a one in time to come, though you hear him not, and pray for him, that in all things he may know God's will, and at all times he may be ready to fulfil it."

Then followed the resignation of his fel-

lowship, the retirement to Littlemore, the withdrawal even from the intercourse of his friends, the unloosing of all the ties that bound him to Oxford, the two years' pondering of the step he was about to take—so that when in 1845 he entered the Church of Rome, he did it by himself, making himself as much as possible responsible only for his own act, and followed by only one or two young friends who would not be kept back. Those who witnessed these things, and knew that, if a large following had been his object, he might, by leaving the Church of England three years earlier, in the plenitude of his power, have taken almost all the flower of young Oxford with him, needed no *Apologia* to convince them of his honesty of purpose. And the moral power his presence had been in Oxford was proved by nothing more than by the tremendous reaction that followed his departure,—a reaction from which we know not if that University has yet recovered. Such was the impression made by that eventful time on impartial but not uninterested spectators—on those who by early education and conviction were kept quite aloof from the peculiar tenets of High Churchmen, but who could not but be struck by the moral quickening which resulted from the movement, and by the marvellous character of him who was the soul of it.

But Dr. Newman himself tells us that all the while the true and primary author of it was out of sight. The Rev. John Keble was at a distance from Oxford, in his vicarage at Hursley, there living in his own life, and carrying out in his daily services and parish ministry those truths which he had first brought forward, and Newman had carried out, in Oxford. But though out of sight, he was not out of mind. *The Christian Year* was in the hands of every one, even the youngest undergraduate. Besides its more intrinsic qualities, the tone of it blended well with the sentiment which the venerable aspect of the old city awakened. It used to be pleasing to try and locate in the neighbourhood of Oxford some of the descriptions of nature with which the poems are inlaid. During these years the poet-priest's figure was but seldom seen in the streets of Oxford,—only when some great question affecting the Church, some discussion of No. 90, or trial of Mr. Ward, had summoned Convocation together. Once, if our memory serves, we remember to have seen him in the University pulpit at St. Mary's, but his voice was not strong, and did not reach many of the audience. His service to his party had lain in another direction. It was he who, by his character,

had first awakened a new tone of sentiment in Oxford, and attracted to himself whatever else was like-minded. He had sounded the first note which woke that sentiment into action, and embodied it in a party. He had kept up, though from a distance, sympathetic intercourse with the chief actors, counselled and encouraged them. Above all, he gave poetry to the movement, and a poetic aspect. Polemics are in themselves dreary work. They do not touch the springs of young hearts. But he who, in the midst of any line of thought, unlocks a fountain of genuine poetry, does more to humanize it, and win for it a way to men's affections, than he who writes a hundred volumes, however able, of controversy. Without disparagement to the patristic and other learning of the party, the two permanent monuments of genius which it has bequeathed to England may be said to be Newman's *Parochial Sermons*, and Keble's *Christian Year*.

All that was known of Keble at that time to the outer world of Oxford was vague and scanty. The few facts here added are taken from what has since been made public by his two friends, Sir John Coleridge and Dr. Newman, the former in his touching sketch, the latter in his *Apologia*. Yet these facts, though few, are well worthy of attention, both because Keble's character is more than his poetry, and because his poetry can only be rightly understood in the light of his character. For there is no poet whose poetry is more truly an image of the man himself, his inner nature, and his outward circumstances. His father, whose name the poet bore, was a country clergyman, vicar of Coln-St-Aldwynd's, in Gloucestershire, but the house in which he lived, and in which the poet was born, was at Fairford, three miles distant from the cure. John was the second child, and eldest son of a family which consisted of two sons and two daughters. His mother, Sarah Maule, was, we have heard, of Scottish extraction. The father, who lived till his ninetieth year, was a man of no common ability. Of him his son, we are told, "always spoke not only with the love of a son, but with the profoundest reverence for his goodness and wisdom." It would seem that this was one of the few clerical homes in England in which the opinions, traditions, and peculiar piety of the Nonjurors lived on into the present century. Unlike most sons distinguished for ability, John Keble never outgrew the period of absolute filial reverence, never questioned a single opinion or prepossession which he had imbibed from his father.

Some of his less reverential companions

used to think that this was an intellectual loss to him. The father's ability and scholarship are proved by his having himself educated his son, and sent him up to Oxford so well prepared, that at the age of fifteen he gained a Corpus scholarship, an honour which seems then to have held the same place in university estimation that Balliol scholarships have long held and still hold. This strictly home training, in the quiet of a Gloucestershire parsonage, placed in the very heart of rural England, under a roof where the old High Church tradition lived on, blended with what was best in modern piety, makes itself felt in every line the poet wrote. On all hands one hears it said that there is no education like that of one of the old English public schools. For the great run of ordinary boys, whether quick-witted and competitive, or lazy and selfish, this may perhaps be true; but for natures of finer texture, for all boys who have a decided and original bias, how much is there that the rough handling of a public school would ruthlessly crush? From all the better public schools coarse bullying, we know, has disappeared; but for peculiarity of any kind, for whatever does not conform itself to their received standard—a manly and straightforward one we admit—they have still but little tolerance. If Keble had once imbibed the public-school spirit, *The Christian Year* would either never have been written, or it would have lacked some of its tenderest, most characteristic traits.

But if he was fortunate in having his boy-education at home, he was not less happy in the college which he entered and the companions he there met. It is the happiness of college life that a young man can command just as much retirement, and as much society as he pleases, and of the kind that he pleases. All readers of Arnold's *Life* will remember the picture there drawn of the Scholars' Common Room at Corpus, by one of the last survivors, the venerable Sir J. Coleridge. He tells us that, when Keble came into residence, early in 1807, it was but a small society, numbering only about twenty undergraduate scholars, and these rather under the usual age, who lived on the most familiar terms with each other. The Bachelor scholars resided and lived entirely with the undergraduates. Two of Keble's chief friends among the Corpus scholars, though younger than himself, were Coleridge, afterwards Judge Coleridge, and Arnold. But Keble must have already graduated before Arnold came into residence. Besides these were many other men distinguished in their day in the University,

but less known to the outer world. It was a stirring time when Keble was an undergraduate. News of the great Peninsular battles was arriving from time to time. Scott's trumpet-blasts of poetry were stirring the young heart. In Corpus Common, as elsewhere, the battles were fought over again, and the classical and romantic schools of poetry were vehemently discussed. And among the more exciting subjects, the young scholar Coleridge would insinuate the stiller and deeper tones of Wordsworth's lyrical ballads, which, then but little known, he had heard of from his great uncle. These two, Scott and Wordsworth, were to the end Keble's first favourites of contemporary poets, and those who most moulded his taste and style. Most of the scholars were high Tories in Church and State, great respecters of things as they are; none, no doubt, more so than Keble. The great questioner of the prevailing creed was Arnold, who often brought down on his own head the concentrated arguments of the whole Common Room. But youth's genial warmth healed these undergraduate disputes, as, alas! the same controversies could not be healed when taken up by the same combatants later in life. In that kindly atmosphere Keble's affectionate nature expanded, as a flower in the sun. His was a temperament to drink in to the full the two finest influences of Oxford—the charm of congenial society, and the romance of all the imagery with which life there is surrounded. Even then Keble seems to have been much the same in character as he was in after years; so that, when a fifty-five years' friendship had come to its earthly close, his early college friend could say of him, "It was the singular happiness of his nature, remarkable even in his undergraduate days, that love for him was always sanctified, as it were, by reverence—reverence that did not make the love less tender, and love that did but add intensity to the reverence."

In Easter term 1810, Keble obtained double first class honours, and this success was soon afterwards followed by another still greater—his election to an Oriel Fellowship. The Oriel Common Room numbered among its Fellows, then and for some afterwards, all that was most distinguished in Oxford for mental power and originality. Copleston, Davison, Whately, then belonged to it, and were among Keble's electors. Arnold, Newman, Pusey, were soon afterwards chosen Fellows of the same college. "Round the fire of the Oriel Common Room," we are told, "there were learned and able, not rarely subtle and disputatious conversations, in which this lad of nineteen

was called to take his part. Amid these he sometimes yearned for the more easy, yet not unintellectual, society of his old friends at Corpus." He found, no doubt, that undergraduate days are more congenial to warm friendships, than the highly-rarefied atmosphere of an intellectual Common Room. Where men touch chiefly by the head, they find that this is the seat as frequently of a repulsive as of an attractive force. While he was an undergraduate, and during the early days of his fellowship, he wrote a good many beautiful little poems, which his friends still possess, and the year after his election to Oriel, he gained the University prizes for the English and Latin essay.

The interval from 1810 to 1815 he spent in Oriel, taking part in college tuition, and acting as an examiner in the Degree Schools. Was it some time during these years, or at a later date, that the incident recorded by Dr. Newman took place? "When one day I was walking in High Street, with my dear earliest friend, with what eagerness did he cry out, 'There's Keble!' and with what awe did I look at him! Then at another time I heard a Master of Arts of my college give an account, how he had just then had occasion to introduce himself on some business to Keble, and how gentle, courteous, and unaffected Keble had been, so as almost to put him out of countenance. Then, too, it was reported, truly or falsely, how a rising man of brilliant reputation, the present Dean of St. Paul's, Dr. Milman, admired and loved him, adding, that somehow he was strangely unlike any one else."

In 1815 he was ordained Deacon, the following year Priest; and soon afterwards left the University, and never again permanently resided there. He had chosen the calling of a clergyman, and though within that sphere other paths more gratifying to ambition lay open to him, he turned aside from them, and gave himself to parochial work as the regular employment of his life. He became his father's curate, and lived with him at Fairford, engaged in this duty for twenty years, more or less. This rare absence or restraint of ambition, where it might have seemed natural or even right to have followed it, was quite in keeping with Keble's whole character. "The Church," says Sir J. Coleridge, "he had deliberately chosen to be his profession, and he desired to follow out that in a country cure. With this he associated, and scarcely placed on a lower level, the affectionate discharge of his duties as a son and brother. Calls, temporary calls, of duty, to his college and university, for a time and at intervals diverted him (he was

again Public Examiner from 1821 to 1823); but he always kept these outlines in view, and as the occasion passed away, reverted to them with the permanent devotion of his heart. Traces of this feeling may be found again and again in *The Christian Year*." This book was first given to the world on the 23d of June 1827, when Keble was in his thirty-fifth year. This, the great work of Keble's life, which will keep his name fresh in men's memory when all else that he has done will be forgotten, had been the silent gathering of years. Single poems had been in his friends' hands at least as early as 1819. They had urged him to complete the series, and by 1827 this was done. No record of the exact time when each poem was written has yet appeared. We should imagine that more of them were composed at Fairford than at Oxford. The discussion and criticism natural to a university are not generally favourable to poetic creation of any kind, least of all to so meditative a strain as Keble's was. But it may have been that in this, as in other things, he was "unlike any one else." It was only at the urgent entreaty of his friends that he published the little book. He was not anxious about poetic fame, and never thought that these poems would secure it. His own plan was "to go improving the series all his life, and leave it to come out, if judged useful, only when he should be fairly out of the way." Had this plan been acted on, how many thousands would have been defrauded of the soothing delight these poems have ministered to them! But even those who most strongly counselled the publication little dreamt what a destiny was in store for that little book. Of course, if the author had kept it by him he might have smoothed away some of its defects, but who knows how much it might have lost too in the process? "No one," we are told, "knew its literary shortcomings better than the author himself. Wisely, and not in pride, or through indolence, he abandoned the attempt at second-hand to amend this inharmonious line, or that imperfect rhyme, or the instances here and there in which his idea may be somewhat obscurely expressed. Wordsworth's acute poetical sense recognised such faults; yet the book was his delight." Probably it was a wise resolve. All emendation of poetry long after its first composition runs the risk of spoiling it. The author has to take up in one mood what was written in another. His first warm feeling of the sentiment has gone cold, and he cannot at a later time revive it. This is true of all poetry, more especially of that which deals with subtle and evanescent

emotions which perhaps never recur exactly in the same form.' Once only in a lifetime may he succeed in catching

"Those brief unisons, which on the brain  
One tone that never can recur has cast,  
One accent never to return again."

In 1833 Keble was appointed Professor of Poetry at Oxford. The Statutes then required the professor to give two or three lectures a year in Latin. The ancient language was required to be spoken from this chair longer than from any other, probably from fear of the trash men might talk if fairly unmuzzled. However prudent this may have been when a merely average functionary filled the chair, it is greatly to be regretted that when there was placed there a true poet, who was intent on speaking the secret of his own art, he should be so formidably weighted. The present gifted occupant of that chair has fortunately been set free, and has vindicated the newly acquired freedom by enriching our literature with the finest poetical criticism it has received since the days of Coleridge. But Keble had to work in trammels. He was the last man to rebel against any limitations imposed by the wisdom or unwisdom of our ancestors. Faithfully he buckled himself to the task of translating into well-rounded Latin periods his cherished thoughts on his own favourite subject. Of the theory of poetry embodied in the two volumes of his published lectures, something may yet be said. The Latin is easy and unconstrained, the thought original and suggestive. A great contrast to the more than Ciceronian paragraphs of his predecessor Copleston, bristling as they are to weariness with all the refinements of Latinity, but underneath these containing little but outworn common-places.

With slight interruptions, Keble continued to live with his father at Fairford, and to assist him as his curate till 1835. "In that year this tie was broken. At the very commencement of it the venerable old man, who to the last retained the full use of his faculties, was taken to his rest; and before the end of it Keble became the Vicar of Hursley, and the husband of Miss Charlotte Clarke, second daughter of an old college friend of his father's, who was incumbent of a parish in the neighbourhood of Fairford. This was the happy settlement of his life. For himself he had now no ungratified wish, and the bonds then tied were loosened only by death."

Only two years before Keble left Fairford, and at the very time when he entered on his poetry professorship, began what is

called the Oxford movement. Of this, Dr. Newman tells us, Keble was the real author. Let us cast a glance back and see how it arose, and what it aimed at. With what feelings Newman, when an undergraduate, looked at Keble, we have seen. Some years afterwards, it must have been in 1819 or 1820, Newman was elected to the Oriel Fellowship which Arnold vacated. Of that time he thus writes:—"I had to hasten to the Tower to receive the congratulations of all the Fellows. I bore it till Keble took my hand, and then felt so abashed, and unworthy of the honour done me, that I seemed quite desirous of sinking into the ground. His had been the first name I had heard spoken of with reverence rather than admiration when I came up to Oxford." This was probably the first meeting of these two. "When I was elected Fellow of Oriel," Dr. Newman continues, "Keble was not in residence, and he was shy of me for years, in consequence of the marks I bore upon me of the evangelical and liberal schools. Hurrell Froude brought us together about 1828. It is one of his sayings preserved in his Remains: 'If I was ever asked what good deed I had ever done, I should say that I had brought Keble and Newman to understand each other.'" Thus made friends, these two were to work great things together.

It naturally occurs to ask how far is *The Christian Year* identified with the principles of the Tractarian movement. On the one hand, *The Christian Year* was published in 1827, the movement did not begin till 1833. The former, therefore, cannot be regarded as in any way a child of the latter. And this accounts for what often has been remarked, how little of the peculiar Tractarian teaching appears in the book. On the other hand, it is easy to see how the same nature which, in a season of quiet, when controversy was at a lull, shaped out of its own musings *The Christian Year*, would, when confronted with opposing tendencies, and forced into a dogmatic attitude, find its true expression in the Tractarian theory. Keble was by nature a poet, living by intuition, not by reasoning; intuition born of, fed by, home affection, tradition, devout religion. His whole being leaned on authority. "Keble was a man who guided himself," says Dr. Newman, "and formed his judgments not by processes of reason, by inquiry or argument, but, to use the word in a broad sense, by authority." And by authority in its broad sense he means conscience, the Bible, the Church, antiquity, words of the wise, hereditary lessons, ethical truths, historical memories. "It seemed to me as if he felt ever happier when he could speak and act

under some such primary and external sanction; and could use argument mainly as a means of recommending or explaining what had claims on his reception prior to to proof. What he hated instinctively was heresy, insubordination, resistance to things established, claims of independence, disloyalty, innovation, a critical or censorious spirit." Keble then lived by authority, and hated the dispositions that oppose it. There is a temper of mind which lives by denying authority—a temper whose essence, or at least whose bad side, is to foster these very dispositions which he hated. With that tone of mind and the men possessed by it, sooner or later he must needs have come into collision. For such a collision, Oxford did not want materials. During Keble's time of residence, and after he went down, the University had been awakening from a long torpor, and entering on a new era. "The march of mind," as it was called, was led by a number of active-minded and able men, whose chief rallying-point was Oriel Common Room, whose best representative was Whately. These men had set themselves to raise the standard of teaching and discipline in the Colleges, and in the University. They were the University Reformers of their day, and to them Oxford, when first arousing itself from long intellectual slumber, owed much. As they had a common aim, to raise the intellectual standard, they were naturally much thrown together, and became the celebrities of the place. Those who did not belong to their party thought them not free from "pride of reason," an expression then, as now, derided by those who think themselves intellectual, but not the less on that account covering a real meaning. It is, as it has been called, "the moral malady" which besets those who live mainly by intellect. Men who could not in heart go along with them thought they carried liberty of thought into presumption and rationalism. They seemed to submit the things of faith too much to human judgment, and to seek to limit their religious belief by their own powers of understanding. They seemed then, as now, "to halve the gospel of God's grace," accepting the morality, and, if not rejecting, yet making little of the supernatural truths on which that morality is based. Such at least was the judgment of their opponents. From men of this stamp, energetic but hard, upright but not very humble or reverent, a man of deeper religious seriousness, like Keble, instinctively "shrank into himself." "He was young in years when he became a University celebrity, and younger in mind. He had the purity and simplicity of a child. He had few sym-

pathies with the intellectual party, who sincerely welcomed him as a brilliant specimen of young Oxford. He instinctively shrank up before literary display, and pomp, and donishness, faults which will always beset academical notabilities. He did not respond to their advances. "Poor Keble," H. Froude used gravely to say, "he was asked to join the aristocracy of talent, but he soon found his own level." He went into the country, but he did not lose his place in the minds of men because he was out of sight. It could not be that Keble and these men could really be in harmony,—they, "sons of Aufklärung," men of mere understanding, bringing all things to the one touchstone of logic and common-sense, and content with this; he, a child of faith, with more than half his nature in the unseen, and looking at things visible mainly as they shadow forth and reveal the invisible. They represented two opposite sides of human nature, sides in all but some rare instances antagonistic, and never seemingly more antagonistic than now. Dr. Arnold, indeed, though belonging in the main to the school of liberalism, combined with it more religious warmth than was common in his own party. It is this union of qualities, generally thought incompatible, which perhaps was the main secret of his great influence. But the combination, which was almost unique in himself, he can hardly be said, by his example, to have rendered more easy for his followers in the present day.

The Catholic Emancipation was a trying and perplexing time for Keble. With the opponents of the measure in Oxford, the old Tory party of Church and State, he had no sympathy. He saw that they had no principle of growth in them, that their only aim was to keep things as they were. His sympathy for the old Catholic religion, that feeling which made him say in *The Christian Year*

"Speak gently of our sister's fall,"

would naturally make him wish to see Catholic disabilities removed. But then he disliked both the man by whom, and the arguments by which, Emancipation was supported. He would rather have not seen the thing done at all, than done by the hands of Whiggery. A few years more brought on the crisis, the inevitable collision. The Earl Grey Administration, flushed with their great Reform victory, went on to lay hands on the English Church, that Church which for centuries had withstood the Whigs. They made their attack on the weakest points, the Irish Church, and suppressed three of its bishoprics. This might seem to be but a



small matter in itself, but it was an indication of more behind. Lord Grey had told the Bishops to set their house in order, and his party generally spoke of the Church as the mere creature of the State, which they might do with as they pleased. The Church must be liberalized, the last teeth pulled from those fangs which had so often proved troublesome to Whiggery. This was too much for Keble. It touched him to the quick, and made him feel that now the time was come when he must speak and act. By nature he was no politician nor controversialist. He disliked the strife of tongues. But he was a man; he had deep religious convictions; and to change what was ancient and catholic in the Church was to touch the apple of his eye. When he looked to the old Tory party he saw no help in them. To the aggressive spirit they had nothing to oppose but outworn Church and State theories. The Bishops, too, were helpless, and spoke slightly of apostolical succession and the non-jurors. Was the Establishment principle, then, the only rock on which the Church was built? Keble and his young friends thought scorn of that. This feeling first found utterance in the assize sermon which Keble preached from the University pulpit, on Sunday the 14th of July 1833, and afterwards published under the title of "National Apostasy." "I have ever considered and kept the day," says Dr. Newman, "as the start of the religious movement of 1823." That sermon itself we have not seen, but the tone of it may be gathered from those lines in the *Lyra Apostolica*, where Keble speaks of

"The ruffian band,  
Come to reform where ne'er they came to pray."

That was a trumpet-note which rallied to the standard of the Church whatever of ardour and devotion young Oxford then contained. These virtues had never been greatly countenanced in the Church of England. To staid respectability it has always been, and still is, one of the chief recommendations of that Church, that it is an embodied protest against what one of its own Bishops is said to have denounced, as "that most dangerous of all errors—enthusiasm." In the last century she had cast out enthusiasm in the person of Wesley; at the beginning of this, she had barely tolerated it in the Newtons and Cecils, and other fathers of evangelicism. But here was a fresh attempt to reintroduce it in a new form. The young men who were roused by Keble's note of warning—able, zealous, resolute—flung aside with disdain timid arguments from expediency. They set themselves to defend the

Church with weapons of more ethereal temper, and they found them, as they believed, in reviving her claims to a heavenly origin and a divine prerogative. That these claims sounded strange to the ears even of Churchmen at that time was to these men no stumbling-block—rather an incentive to more fearless action. True, such a course shut them out from preferment, hitherto the one recognised aim of the abler English Churchmen. But these younger men were content to do without preferment. They had at least got beyond that kind of worldliness. If self still clung to them in any shape, it was in that enlarged and nobler form, in which it is one with the glory of the Church Catholic in all ages. The views and aims of the new party soon took shape in the "Tracts for the Times." If Keble was the starter of the movement, J. H. Newman soon became its leader. In all his conduct of it, one his great aims was to give to the sentiments which had originated with Keble a consistent logical basis. The sequel all men know. The inner working of the movement may be read in *The Apologia*.

As for Keble, during the eventful years that followed, though his place was still in his country cure, his sympathies and co-operation were with Newman and other friends in Oxford. He contributed some of the more important Tracts; poems of his embodying the sentiments of the party appeared from time to time, and were republished in the *Lyra Apostolica*. In 1841, when the famous No. 90 was published, to the scandal of the whole religious world, Keble was one of the few who stood by Newman. What then must his feelings have been when that younger friend, by whom he had so stood, with whom he had so often taken counsel, abandoned the Church of England, and sought refuge in that of Rome? As late as 1863, a friend of his, when walking with him near Hursley, drew his attention to a broken piece of ground—a chalk-pit, as it turned out—hard by. "'Ah!' he said, 'that is a sad place, connected with the most painful event of my life.'" I began to fear that it had been the scene of some terrible accident which I had unwittingly recalled to his mind. 'It was there,' he went on, 'that I first knew for certain that J. H. N. had left us. We had made up our mind that such an event was all but inevitable; and one day I received a letter in his handwriting. I felt sure of what it contained, and I carried it about with me through the day, afraid to open it. At last I got away to that chalk-pit, and there forcing myself to read the letter, I found that my forebodings had been



too true; it was the announcement that he was gone."

It seems natural to ask how it came that, when Newman left, Keble adhered to the Church of England. They were at one in their fundamental principles. What, then, determined them to go different ways? Of many reasons that occur this one may be given. The two friends, though agreeing in their principles, differed widely in mental structure and in natural temperament. They differed scarcely less in training and circumstances. Keble, as we have seen, cared little for reasoning, and rested mainly on feeling and intuition. Newman, on the other hand, though fully alive to these, added an unresting intellectual instinct which could not be satisfied without a defined logical foundation for what it instinctively held. Not that Keble was without a theory. Taking from Butler the principle that probability is the guide of life, he applied it to theological truth. Butler, by a very questionable process, had employed the maxim of worldly prudence, that probability is the guide of life, as an argument for religion, but mainly in the natural sphere. Keble tried to carry it on into the sphere of revealed truth. The arguments which support religious doctrine, he said, may be only probable arguments judged intellectually; but faith and love, being directed towards their Divine Object, and living in the contemplation of that Object, convert these probable arguments into certainties. In fact the inward assurance, which devout faith has of the reality of its Object, makes doctrines practically certain, which may not be intellectually demonstrable. Newman tells us that he accepted this view so far, but, not being fully satisfied with it, tried, in his University sermons and other works, to supplement it with considerations of his own. In time, however, he felt it give way in his hands, and either abandoned it, or allowed it to carry him elsewhere.

But besides difference of mental structure, there were other causes which perhaps determined the divergent courses of the two friends. In the case of Keble, whatever is most sacred and endearing in the English Church had surrounded his infancy and boyhood, and gone with him into full manhood. With him home-affection was hardly less sacred than loyalty to the Faith. These two influences were so intertwined in the inner fibres of his nature that it would have been to him very death to separate them. Of Dr. Newman's early associations we know no more than the little he has himself disclosed. It would appear, however, that the Anglican Church never had so invincible a hold on him as it had on Keble. By few perhaps

has it been seen in so winning an aspect as it wore in the quiet of that Gloucestershire parsonage.

When, in 1835, Keble left the home of his childhood for the vicarage of Hursley, he found a church there not at all to his mind. It seems to have been a plain, not beautiful, building of flint and rubble. Keble determined to have a new one built,—new all but the tower—and in this he employed the profits of the many editions of *The Christian Year*; and when the building was finished, his friends, in token of their regard for him, filled all the windows with stained glass. "Here daily for the residue of his life, until interrupted by the failing health of Mrs. Keble and his own, did he minister . . . . He had not, in the popular sense, great gifts of delivery; his voice was not powerful, nor was his ear perfect for harmony of sound; but I think it was difficult not to be impressed deeply both by his reading and his preaching; when he read, you saw that he felt, and he made you feel, that he was the servant of God, delivering His words; or leading you, as one of like infirmities and sins with your own, in your prayer. When he preached it was with an affectionate simplicity and hearty earnestness which were very moving; and the sermons themselves were at all times full of that abundant scriptural knowledge which was the most remarkable quality in him as a divine: it has always seemed to me among the most striking characteristics of *The Christian Year*. It is well known what his belief and feelings were in regard to the Sacraments. I remember on one occasion when I was present at a christening as godfather, how much he affected me, when a consciousness of his sense of the grace conferred became present to me. As he kept the newly-baptized infant for some moments in his arms, he gazed on it intently and lovingly with a tear in his eye, and apparently absorbed in the thought of the child of wrath become the child of grace. Here his natural affections gave clearness and intensity to his belief; the fondest mother never loved children more dearly than this childless man."

When Newman was gone, on Keble, along with Dr. Pusey, was thrown the chief burden of the toil and responsibility arising out of his position in the Church. Naturally there was great searching of hearts amongst all the followers of the Oxford theology. Keble had to give himself to counsel the perplexed, to strengthen the wavering, and, as far as might be, to heal the breaches that had been made. Throughout the ecclesiastical contests of the last twenty years,

though never loud or obtrusive, he yet took a resolute part in maintaining the principles with which his life had been identified. One last extract from Sir J. Coleridge's beautiful sketch of his friend will give all that need here be said of this portion of Keble's life:—"Circumstances had now placed him in a position which he would never have desired for himself, but from which a sense of duty compelled him not to shrink. Questions one after another arose touching the faith or the discipline of the Church, and affecting, as he believed, the morals and religion of the people. I need not specify the decisions of Courts or the proceedings in Parliament to which I allude; those whose consciences were disturbed, but who shrunk from public discussion, and those who stirred themselves in canvassing their propriety, or in counteracting their consequences, equally turned to him as a comforter and adviser in private and in public, and he could not turn a deaf ear to such applications. It is difficult to say with what affectionate zeal and industry he devoted himself to such cares, how much, and at length it is to be feared how injuriously to his health, he spent his time and strength in the labour these brought on him. Many of these involved, of course, questions of law, and it was not seldom that he applied to me—and thus I can testify with what care and learning and acuteness he wrote upon them. Many of his fugitive pieces were thus occasioned; and should these be, as they ought to be, collected, they will be found to possess even more than temporary interest. I had occasion, but lately, to refer to his tract on 'Marriage with the Wife's Sister,' and I can only hope that the question will soon be argued in Parliament with the soundness and clearness which are there employed. But even all this does not represent the calls made on his time by private correspondence, by personal visits, or, where it was necessary, by frequent, sometimes by long journeys, taken for the support of religion. I need hardly say that his manner of doing all this concurred in raising up for him that immense personal influence which he possessed; people found in their best adviser the most unassuming, unwearied, affectionate friend, and they loved as well as venerated him."

The appearance of Dr. Newman's *Apologia* in 1864 was to Keble a great joy. Not that he had ever ceased to love Dr. Newman with his old affection, but the separation of now nearly twenty years, and the cause of it, had been to Keble the sorest trial of his life. If the book contained some things regarding the Church of England which must have pained Keble, there was much more in it to glad-

den him; not only the entire human-heartedness of its tone, which made its way to the hearts even of strangers, but the deep and tender affection which it breathes to Dr. Newman's early friends, and the proof it gave that Rome had made no change either in his heart or head which could hinder their real sympathy. The result was that in September last these three, Drs. Newman, Pusey, and Mr. Keble, met under the roof of Hursley Vicarage, and after an interval of twenty years looked on each others' altered faces. It happened, however, that at the very time of this meeting Mrs. Keble had an alarming attack of illness. Keble writes:—"He (Dr. Pusey) and J. H. N. met here the very day after my wife's attack. P., indeed, was present when the attack began. Trying as it all was, I was very glad to have them here, and to sit by them and listen."

Soon after this, in October, Mr. and Mrs. Keble left Hursley for Bournemouth, not to return. Since the close of 1864 symptoms of declining health had shown themselves in him also. The long strain of the duties that accumulated on him in his later years, with the additional anxiety caused by Mrs. Keble's precarious health, had been gradually wearing him. After only a few days' illness he was taken to his rest on the day before last Good Friday. In a few weeks Mrs. Keble followed, and now they are laid side by side in Hursley churchyard.

The picture of this saintly life will of course be given in time to the world. It is earnestly to be hoped that the task will be intrusted to some one able to do justice to it. There are two kinds of biographies, and of each kind we have seen examples in our own time. One is a golden chalice, held up by some wise hand, and gathering the earthly memory ere it is spilt on the ground. The other kind is as a millstone, hung by partial, yet ill-judging friend, round the hero's neck to plunge him as deep as possible in oblivion. In looking back on the eminent men of last generation, we have seen one or two lives of the former stamp, many more of the latter. Let us indulge the hope that he who writes of Keble will take for his model the one or two nearly faultless biographies we possess, and above all that he will condense it within such limits as will commend it not only to partial friends, but also to all thoughtful readers.

By his character and influence Keble did more than perhaps any other man to bring about the most widely-spread quickening of religious life which has taken place within the English Church since the Reformation. To him, and the party to which his very

name was a tower of strength, England owes two great services. First, they, and they pre-eminently, have turned, and are still turning, a resolute front against the rationalizing spirit, which would pare down revelation to the measure of the human understanding—cut away its foundation in the supernatural, and virtually reduce it to a moral system encased perhaps in a few historic facts. Secondly, they have introduced into the English Church a higher order of character, and taught it, we might almost say, new virtues. They have diffused widely through the clergy the contagion of their own zeal and resoluteness, their self-devotion and Christian chivalry. These are high services to have rendered to any country in any age. But this acknowledgment must be modified by two regrets: one, that with their defence of the faith they should have mixed up positions which are untenable, identifying with Christianity doctrines which are no part of it, but merely accretions gathered by the Church in its progress down the ages; the other, that they should have impaired the practical power of their example by the exclusive and unsympathetic side they have turned towards their fellow-Christians in other Reformed communions. But though these things must be said, it is not as of a partisan that we would most think of Keble. The circumstances of his time forced him to take a side, but his nature was too pure and holy to find fit expression in polemics; and the memory of his rare and saintly character will, we trust, long survive in the hearts of his countrymen, when the party strifes in which it was his lot to mingle have passed into oblivion.

Of his two prose works, his edition of Hooker's Works, which has, we believe, superseded every other, and his Life of the good Bishop Wilson of Sodor and Man, the author of the *Sacra Privata*, we cannot speak. But before turning to *The Christian Year*, his later book of poetry, the *Lyra Innocentium*, must not be passed unnoticed. It appeared in 1846, at an interval of nearly twenty years after *The Christian Year*. This collection of poems he speaks of in May 1845, as "a set of things which have been accumulating on me for the last three or four years. It has been a great comfort to me in the desolating anxiety of the last two years, and I wish I could settle at once on some other such work." Children, as we have seen, had always been peculiarly dear to this childless man, and he had at first wished to have made these poems a Christian Year for teachers and nurses, and others much employed about children. In time it took a different shape, but it is perhaps to

be regretted that he had not made it what he at first intended. Children, their thoughts and ways, and the feelings they awaken in their elders, are themes of quite exhaustless interest. And yet how seldom has any poet of adequate tenderness and depth approached that mysterious world of childhood! Wordsworth, indeed, has felt it deeply, and some of his most exquisite poems express it:—

"Dearest boy, my heart  
For better lore would seldom yearn,  
Could I but teach the hundredth part  
Of what from thee I learn."

Of the poems on children which the *Lyra Innocentium* contains, we are free to confess that they approach their subject too exclusively from the Church side for general interest. "Looking Westward," "The Bird's Nest," "Bereavement," are fine lyrics, equal perhaps to most in *The Christian Year*.

But there is no thought in the *Lyra Innocentium* about childhood that comes near that earlier strain in which the poet, as he looks on children ranged to receive their first lessons in religion, bursts forth—

"Oh! say not, dream not, heavenly notes  
To childish ears are vain,  
That the young mind at random floats  
And cannot reach the strain."

"Dim or unheard the words may fall,  
And yet the heaven-taught mind  
May learn the sacred air, and all  
The harmony unwind."

"Was not our Lord a little child,  
Taught by degrees to pray;  
By father dear and mother mild  
Instructed day by day?"

Then, after an interval he goes on—

"Each little voice in turn  
Some glorious truth proclaims,  
What sages would have died to learn  
Now taught by cottage dames."

"And if some tones be false or low,  
What are all prayers beneath  
But cries of babes that cannot know  
Half the deep thought they breathe?"

Whatever the reason may be, certainly the later book does not strike home to the universal heart as *The Christian Year* did, and it never has attained anything like the same popularity.

The reference to ecclesiastical usages, not known to the many, and the more pronounced High Church feeling which it embodies, will partly account for this. It is certainly much more restricted and less catholic in its range. Partly also it may be that the fountain of inspiration does not flow so fully as

in earlier years. It may not have been that time had chilled it: but other duties and cares had come upon him since his poetic springtime. Especially the polemical stir in which his share in the Oxford movement had involved him, and the anxiety in the midst of which the *Lyra Innocentium* was composed, must have left little of that leisure either of time or heart which is necessary for a free-flowing minstrelsy.

It may help to the fuller understanding of *The Christian Year*, if we turn for a moment to Keble's theory of poetry. He has set it forth at large in his *Prælections on Poetry*, more shortly in his review of the *Life of Scott*, which, once famous in Oxford, is almost unknown to the present generation. That review, which first appeared in the *British Critic*, is well worthy of being republished, both as an exposition of Keble's character, and of his views on poetry, and also as a study of Scott by a reverential admirer, very unlike himself. The theory is that poetry is the natural relief of minds overpowered by some engrossing idea, or strong emotion, or ruling taste, or imaginative regret, which from some cause or other they are kept from directly indulging. Rhythm and metrical form serve to regulate and restrain, while they express those strong or deep emotions, "which need relief, but cannot endure publicity." They are at once a "vent for eager feelings and a veil to draw over them. For the utterance of high or tender feeling controlled and modified by a certain reserve is the very soul of poetry."

On this principle Keble founds what he regards as an essential distinction between primary and secondary poets. Primary poets are they who are driven by some overmastering enthusiasm, by passionate devotion to some range of objects, or line of thought, or aspects of life or nature, to utter their feelings in song. They sing, as it were, because they cannot help it. There is a melody within them which will out, a fire in their blood which cannot be suppressed. This is the true poetic *πάθος* of which Plato speaks. Secondary poets are not urged to poetry by any overflowing sentiment; but learning, admiration of great masters, choice, and a certain literary turn, have made them poetic artists. They were not born, but being possessed of *εὐφροσύνη*, have made themselves poets. Of the former kind are Homer, Lucretius, Shakspeare, Burns, Scott; of the latter, Euripides, Dryden, Milton. This view, if it be somewhat too narrow a basis on which to found a comprehensive theory of poetry, certainly does lay hold of one side of the truth generally over-

looked. In our own day, how many are there, possessed of a large measure of artistic faculty, able to treat poetically anything they take up, wanting only in one thing,—a subject which absorbs their interest. There is nothing in human life, or history, or nature, which they have made peculiarly their own, nothing about which they feel more deeply, or which they know more intimately, than the host of educated men. And so, though with a "skill in composition and felicity of language" greater than many poets possess, they are still felt to be literary men rather than poets, because they have no genuine impulse, no divine enthusiasm, driving them to seek relief in poetry.

If we apply to himself the author's own canon, *The Christian Year* would place him in the rank of primary poets. Not that it displays anything like the highest artistic faculty, but because it evidently flows from a native spring of inspiration. As far as it goes, it is genuine poetry. The author sings in a strain of his own of the things he has known, and felt, and loved. Beneath all the layers that early education and Oxford training have superimposed, there is felt to be a glow of internal heat not derived from these. The characteristic qualities of the book seem to be—*First*, a tone of religious feeling, deep and tender beyond what was common even in religious men in the author's day, perhaps in any day; *secondly*, great intensity and tenderness of home affection; *thirdly*, a shy and delicate reserve, which loved quiet paths and shunned publicity; *fourthly*, a pure love of nature, and a spiritual eye to read nature's symbolism—

"He sang of love, with quiet blending,  
Slow to begin, and never-ending,  
Of serious faith, and inward glee."

To English Church people without number *The Christian Year* has long been not only a cherished classic, but a sacred book, which they place beside their Bible and their Prayer-Book. On the other hand, a generation of literary young men has grown up, who, having had their tastes formed on a newer, more highly spiced style of poetry, scarcely know *The Christian Year*, and, if they knew it, would turn away from what seemed to them its meagre literary merit. It would be impossible to say anything regarding it which would not seem faint praise to the one class, and exaggeration to the other. But without trying to meet the views of either, we may note for ourselves what seem to be its special characteristics:—

I. It embodies deep and tender religious sentiment in a form which is old, and yet

new. Our best critic has lately told us that "the inevitable business for the modern poet, as it was for the Greek poet in the days of Pericles, is to interpret human life afresh; and find a new spiritual basis for it." Keble did not think so. He was content with the interpretation which Christianity has put on human life, and wished only to read man and nature, as far as might be, in this light. Goethe, we suppose, is the great modern instance of a poet who has tried "to give a moral interpretation of man and the world from an independent point of view." Of course it would be simply ridiculous for a moment to place the poetic powers of Keble in comparison with such an one as Goethe. But, disparate as their powers are, Keble with his limited faculty, just by virtue of his having accepted the Christian interpretation, while the other rejected it, has spoken, we venture to think, more words that meet the simple needs of the heart, that satisfy man's highest moral aspirations, than Goethe with all his world-wide breadth has done. The religion which Keble laid to heart, and lived by, would not seem to come to him through prolonged spiritual conflicts, as did that of the great Puritans; neither had he reached it by laborious critical processes, as modern philosophers would have us do. He had learnt it at his mother's knee. It was systematized and confirmed by the daily teaching of the Church which he so devoutly loved. Time brought to it expansions from various quarters, but no break. The powerful influences of his university, direct and indirect, chivalry reawakening in Scott's poetry, meditative depth in Wordsworth, these all melted naturally into his primal faith, and combined with the general tendencies of the time to carry him in spirit back into those older ages where his imagination found ampler range, his devotion severer, more self-denying virtues than modern life engenders. Out of that great past he brought some of the sterner stuff of which the martyrs were made, and introduced it like iron into the blood of modern religious feeling. A poet who received all these influences into himself and vitalized them, could not but make the old new. For not till the authoritative had been inwardly transfused into the moral and spiritual did it for the most part find vent in his poetry. There are exceptions to this which form what we regard as among the shortcomings of *The Christian Year*. But in all its finer, more vital poems the catholic faith has become personal, rests frankly on intuition and experience, as frankly as the vaguer more impersonal meditations of great poets.

"The eye in smiles may wander round,  
Caught by earth's shadows as they fleet,  
But for the soul no home is found,  
Save him who made it, meet.

Or again the well-known—

"Abide with me from morn till eve,  
For without thee I cannot live,  
Abide with me when night is nigh,  
For without thee I dare not die."

It is the many words, simple yet deep, devoutly Christian, yet intensely human, like these, scattered throughout its pages, that have endeared *The Christian Year* to countless hearts within the English Church, and to many a heart beyond it. The new elements in the book are perhaps these—first, it translates religious sentiment out of the ancient and exclusively Hebrew dialect into the language of modern feeling. Hitherto English devotional poetry, with the exception perhaps of some passages in Cowper, had adhered rigorously to the scriptural imagery and phraseology. This, besides immensely limiting their range, made their words often fall wide of modern life. Keble took thoughts and sentiments of which men at the present day are conscious, expressed them in fitting modern words, and transfused into them the Christian spirit; secondly, there is visible in him, first perhaps of his contemporaries, that which seems the best characteristic of modern religion, combined with devout reverence for the person of our Lord, a closer, more personal love to Him as to a living friend. There were no doubt rare exceptions here and there, but, generally speaking, religious men before spoke of our Lord in a more distant way, as one holding the central place rather in a dogmatic system than in the devout affections. The best men of our own time have gone beyond this. The Lord of the Gospels, in His Divine Humanity, has come nearer their hearts, and made Himself known in a more intimate and endearing way. In none perhaps was this change of feeling earlier seen, or more strongly marked, than in Keble. Then there is the close and abundant knowledge of Scripture. Without confining himself to the imagery or language of the Bible, he everywhere shows his intimacy with it, and interweaves its words gracefully with his own.

These are some of the more catholic notes of the book which have won for it a place in the affections of Christians of every communion. This catholicity of religious sentiment is no doubt its most valuable quality. From this some may be ready to draw an argument for Christian morality disjoined from Christian doctrine, or for some all-em-

bracing religion which would comprehend whatever the various Churches agree in, discarding all in which they differ. What that residuum exactly is no one has yet stated. But before drawing such an argument from *The Christian Year*, it may be as well to ask whether that book would have been so charged with devout Christian sentiment if its author had not held with all his heart those doctrinal truths which in his case gave birth to that sentiment, but which many now wish to get rid of? If we value the consummate flower, it might be as well not to begin by cutting away the root. There is, however, another side on which *The Christian Year* is less catholic in its character. This, which may be called its ecclesiastical side, is inherent in the very form of the book. A poem for each Sunday in the year would be welcome to very many, but then what is to determine the subject for each Sunday's poem? A chance verse or phrase in the Gospel for the day, as this is given in the Prayer-Book, is hardly a catholic or universal ground for fixing the subject. Again, Christmas, Good Friday, Easter Day, Whitsunday, have of course a catholic meaning, because these days, though not observed by all Churches, are yet memorials of the sacred facts by which all Christians live. But the lesser Saints' Days, Circumcision, Purification, as well as the occasional services, have a local and temporary, not a universal import. Accordingly, a perusal of the poems suggests what the preface to them confirms, that they did not all flow off from a free spontaneous inspiration awakened by the thought natural to each day, but that a good number were either poems previously composed and afterwards adapted to some particular Sunday, or written as it were to order, after the thought of rounding *The Christian Year* had arisen. So clear does this seem that it would not be hard to go through the several poems and lay finger here on the spontaneous effusions, there on those of more labored manufacture. The former flow from end to end lucid in thought, simple and almost faultless in diction; no break in the sense, no obscurity; seldom any harshness or poverty in the diction. The others are imperfect in rhythm and language, defaced by the conventionalities of poetic diction, frequently obscure or artificial, the thread of thought broken or hard to divine. The one set are like mountain streams, that run clear and bright down the hill-side in the sunshine, the other are like streams that find their way through difficult places, often hidden underground or buried in heaps of stones. Yet even the most defective of them come forth to light in some single verse of profound thought or

tender feeling, so well expressed as to make the reader willingly forgive for that one gleam the imperfection of the rest.

II. The next quality we would notice is the deep tone of home affection which runs through these poems. This, perhaps as much as anything, has endeared them to his home-loving countrymen. Such is that feeling for an ancient home breathed in

"Since all that is not heaven must fade,  
Light be the hand of Ruin laid  
Upon the home I love:  
With lulling spell let soft Decay  
Steal on, and spare the giant sway,  
Tho' crash of tower and grove.

"Far opening down some woodland deep  
In their own quiet glade should sleep  
The relics dear to thought,  
And wild-flower wreaths from side to side  
Their waving tracery hang, to hide  
What ruthless Time has wrought."

Again, the hymn for St. Andrew's Day is so well known and loved as hardly to need quoting. Every line of it is instinct with simple pure affection, yet never, one might think, so deeply felt or so well expressed as here—

"When brothers part for manhood's race,  
What gift may most endearing prove  
To keep fond memory in her place,  
And certify a brother's love?

"No fading frail memorial give  
To soothe his soul when thou art gone,  
But wreaths of hope for aye to live,  
And thoughts of good together done."

Besides the more obvious allusions to the household charities, there are many delicate, more reserved touches on the same chord. Such is the—

"I cannot paint to Memory's eye  
The scene, the glance I dearest love—  
Unchanged themselves, in me they die,  
Or faint, or false, their shadows prove.

"Meanwhile, if over sea or sky  
Some tender lights unnoticed fleet,  
Or on loved features dawn and die,  
Unread, to us, their lesson sweet;

"Yet are there saddening sights around,  
Which Heaven in mercy spares us too."

But there is no need to go on with quotations. Many more such passages will occur to every reader. High education and refined thought in him had not weakened, but only made natural affection more pure and intense. Yet in the affectionate tenderness there is no trace of effeminacy. True, the woman's heart everywhere shows itself. But as it has been said that in the countenance



of most men of genius there is something of a womanly expression not seen in the faces of other men; so it is distinctive of true poetic temper that it carries the woman's heart within the man's. And certainly of no poet's heart does this hold more truly than of Keble's. They, however, must be but blind critics, insensible to the finer pathos of human life, who have on this account called Keble's poetry "effeminate." The woman's heart in him is blended with the martyr's courage. Hardly any modern poetry breathes a firmer self-control, a more fixed yet calm resolve, a sterner self-denial. If these be qualities compatible with effeminacy, then Keble's poetry may be allowed to pass for effeminate. But those who brought this charge against it, misled, it may be, by the loud bluster that passes with many for manliness, seem not to be aware that the bravest and most trustworthy manhood is also the gentlest and most tender hearted.

III. This naturally leads us on to notice another characteristic of this poetry—the fine reserve which does not publish aloud, but only delicately hints its deeper feelings. It was an intrinsic part of Keble's nature to shrink from obtruding himself, to dislike display,

"To love the sober shade  
More than the laughing light."

And one object he had in publishing *The Christian Year* was the hope that it might supply a sober standard of devotional feeling, in unison with that presented by the Prayer-Book. The time, he thought, was one of unbounded curiosity and morbid craving for excitement, symptoms which have not abated during the forty years since Keble so spoke. He wished, as far as might be, to supply some antidote to these tendencies. Again modern thought has, as all know, turned in upon itself and discovered a whole internal world of reflections and sensibilities hardly expressed in the older literature. Keble so far shared this tendency with his contemporaries. But he set himself not to feed and pamper it, but to direct, to sober, and to brace it, by bringing it into the presence of realities above itself.

This feeling of delicate reserve, sobered and strengthened by Christian thought, comes out in many of the poems, in none perhaps more than in the one which contains these stanzas:—

"Even human love will shrink from sight  
Here in the coarse rude earth:  
How then should rash intruding glance  
Break in upon *her* sacred trance  
Who boasts a heavenly birth?"

"So still and secret is her growth,  
Ever the truest heart,  
Where deepest strikes her kindly root  
For hope or joy, for flower or fruit,  
Least knows its happy part."

"God only, and good angels, look  
Behind the blissful screen—  
As when triumphant o'er His woes,  
The Son of God by moonlight rose,  
By all but Heaven unseen."

We would not pause on verbal criticisms,—only the last line of the second stanza here is one of many instances in which the beauty of the finest thoughts is marred by the admission of some hackneyed conventional phrase. Otherwise, these stanzas, as well as the whole poem in which they occur, are in Keble's finest and most characteristic vein. In keeping with the feeling breathed by these lines is another which should be noted. It is for the virtues and the characters, which the world least recognizes, that he reserves his heart's best sympathy. For the loud, the successful, the caressed, he has no word, but perhaps one of admonition. It is the poor, the bowed down, the lonely, the forsaken, who draw out his thoughts of tenderest consolation. And what makes this the nobler in Keble is, that it does not seem to come from the principle of "*haud ignarus mali*," but rather from pure strength of Christian sympathy. And as is the inward tone of feeling, so is its outward expression, chastened and subdued. There is no gorgeousness of colouring, no stunning sound, no highly spiced phrase or metaphor. From what have been the chief attractions of much poetry popular since his day,—scarlet hues and blare of trumpets, staring metaphors and metaphysical enigmas, he turned instinctively. He seemed to say to these,

"Farewell: for one short life we part:  
I rather woo the soothing art,  
Which only souls in sufferings tried  
Bear to their suffering brethren's side."

Those who have called other parts of Keble effeminate, might perhaps call this ascetic. If it is so, it is an asceticism in harmony with true Christianity, and with the sober wisdom that comes from life's experience.

IV. Much has been said of Keble's eye for nature. His admirers perhaps exaggerate it, his depreciators as much underrate it. He certainly shared largely in that feeling about the visible world, so identified with Wordsworth that it may be called Wordsworthian, that feeling which more than any other marks the direction in which modern imagination has enlarged and deepened. The appearances of nature furnish

Keble with the framework in which most of his lyrics are set, the mould in which they are cast. Some whole poems, as that beginning

"Lessons sweet of spring returning,"

are little more than descriptions of some scene in nature. Many more take some natural appearance and make it the symbol of some spiritual truth. Two small rills, born apart and afterwards blending in one large stream, are likened to two separate prayers uniting to bring about some great result. The autumn clouds, mantling round the sun for love, suggest that love is life's only sign. The robin singing unwearily in the bleak November wind, suggests a lesson of content—

"Rather in all to be resigned than blest."

These and many more are the natural appearances, which, some by resemblance, some by contrast, furnish him with key-notes for religious meditations. In many you feel at once that the poet has struck a true note, one which will be owned by the universal imagination, wherever that faculty is sufficiently cultivated to be alive to it. In some you feel more doubtful,—the analogy appears to be somewhat more faint or far-fetched. In others you seem to see clearly that the resemblance is arbitrary and capricious, a work of the mere fancy, not of the genuine imagination. An instance of the last kind has been severely commented on by a contemporary critic, who, on the strength of some doubtful analogies which occur in Keble's poems, has voted him no poet. This critic specially comments on one poem, in which the moon is made a symbol of the Church, the stars are made symbols of saints in heaven, and the trees in Eden of saints on earth. This, if it be not some remote allusion to passages of Scripture, must be allowed to be a mere ecclesiastical reading of nature's symbols, repudiated by the universal heart of man, and therefore by true poetry. But if this and some other instances, pitched on a false key, can be pointed out, how many more are there where the chord struck answers with a genuine tone? Even in the very poem which contains the symbolism condemned, is there not the following?—

"The glorious sky embracing all  
Is like the Maker's love,  
Wherewith encompassed great and small  
In peace and order move."

Here Keble has Christianized an analogy, acknowledged not only by the Greek con-

ception of Zeus, but more or less, we believe, by the primeval faith of the whole Aryan race.

As might be looked for in a real lover of nature, Keble's imagery is that which he had lived in the midst of, and knew. The shady lanes, the more open hursts and downs, such as may be seen near Oxford, and farther west and south, "England's primrose meadow paths," the stiles worn by generations, and the grey church-tower embowered in elm-trees,—with these his habitual thoughts and sentiments suit well. Seldom does his poetry visit mountain lands—once only in *The Christian Year*. The poem for the 20th Sunday after Trinity, though good, might have been written by one who had never seen mountains, if only he had read descriptions of them.

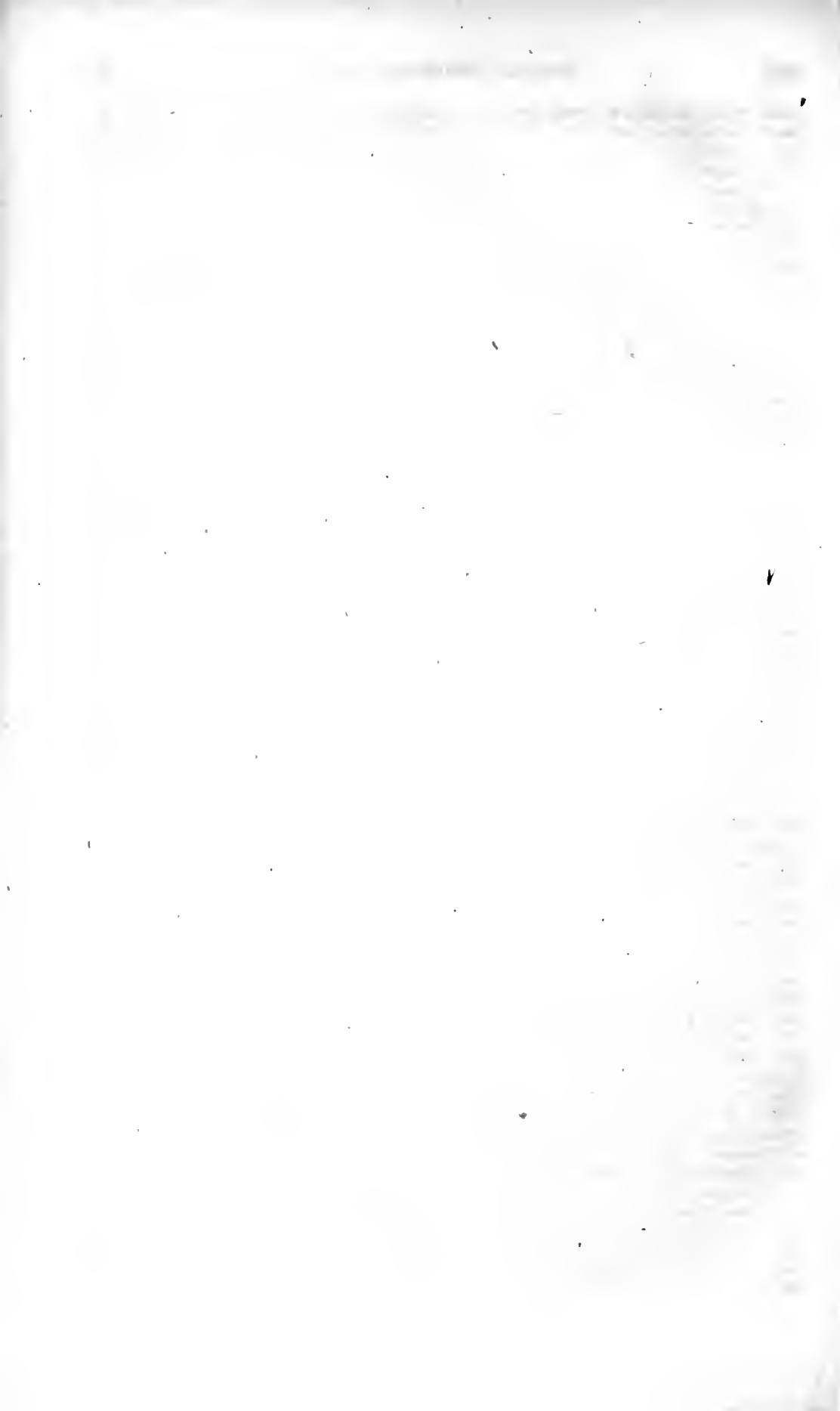
Besides the English there is another kind of landscape in which he has shown himself at home. Dean Stanley has noted the fidelity with which Keble has pictured scenes in the Holy Land. This shows not only a close study of the hints that are to be found in the Bible, and in the modern books about Palestine,—it proves how quick must have been the insight into nature in one who, though he had never himself beheld that country, could from such materials call up pictures true enough to gratify one of the most graphic of modern travellers while he gazed on those very scenes.

There are two sides which nature turns towards the imagination. One is that which the poet can read figuratively, in which he can see symbols and analogies of the spiritual world. This side Keble, as we have seen, felt and read, in the main we think truly, though sometimes he may have erred. What the true reading is, and how it is to be discerned, is a weighty matter. One thing, however, is certain, that the correspondency between the natural object and the spiritual, between nature and the soul, is there existing independently of the individual man. He did not make the correspondency; his part is to see and interpret truly what was there beforehand, not to read into nature his own views or moods waywardly and capriciously. The truest poet is he who reads nature's hieroglyphics most truly and most widely; and the test of the true reading is that it is at once welcomed by the universal imagination of man. This universal or catholic imagination of man is far different from the universal suffrage of man. It means the imagination of those in whom that faculty exists cultivated to the highest possible point of truthfulness and sensibility. The imagination is the faculty which reads truly, the fancy that which reads capriciously, and so falsely. The

former seizes true and real existences, analogies between nature and spirit; the latter makes arbitrary and fictitious ones. In this school of imagination Keble was a faithful and devout student. It was the music of his pious spirit to read aright the symbolical side which nature turns towards man.

But nature has another side, of which there is no indication in Keble's poetry. We mean her infinite and unhuman side, which yields no symbols to soothe man's yearnings. Outside of and far beyond man, his hopes and fears, his strivings and aspirations, there lies the vast immensity of nature's forces, which pays him no homage, and yields him no sympathy. This aspect of nature may be seen even amid the tamest landscape if we look to the clouds or the stars above us, or to the ocean roaring around our shores. But nowhere is it so borne in on man as in the midst of the vast deserts of the earth, or in the presence of the mountains, which seem so impassive and unchangeable. Their permanence and strength so contrast with man—of few years and full of trouble; they are so indifferent to his feelings or his destiny. He may smile or weep, he may live or die: they care not. They are the same in all their ongoings, happen what will to him. They respond to the sunrises and the sunsets, but not to his sympathies. All the same they fulfil their mighty functions, careless though no human eye should ever look on them. So it is in all the great movements of nature. Man holds his festal days, and nature frowns; he goes forth from the death-chamber, and nature affronts him with sunshine and the song of birds. Evidently, it seems, she marches on having a purpose of her own with which man has nothing to do: she keeps her own secret, and drops no hint to him. This mysterious silence, this unhuman indifference, this inexorable deafness, has impressed the imagination of the greatest poets with a vague yet sublime awe. The sense of it lay heavy on Lucretius, Shelley, Wordsworth, and drew out from their souls their profoundest music. This side of things, whether philosophically or imaginatively regarded, seems to justify the saying, that "the visible world still remains without its divine interpretation." But it was not on thoughts of this kind that Keble loved to dwell. If they ever occurred to him, he has nowhere expressed them. He was content with that other side of nature, of which we spoke first, the side which allows itself to be

humanized, that is, to be interpreted by man's faith and devout aspirations. This was the side that suited his religious purpose, and to this he limited himself. Within this range few have ever interpreted nature more soothingly and beautifully. These are a few of the qualities that would strike any one on first opening *The Christian Year*. They are not, however, enough to account for its unparalleled popularity. Indeed, popularity is no word to express the fact, that this book has been for years the cherished companion in their best moods of numbers of the best men, of the most diverse characters and schools, who have lived in our time. The secret of this power is a compound of many influences hard to state or explain. It has not been hindered by the blemishes obvious on the surface to every one, inharmonious rhythms, frequent obscurity, here and there poverty and conventionality of diction. In spite of these blemishes, it has won its way to the hearts of the highly educated and refined, as no book of poetry, sacred or secular, in our time has done. Will it continue to do so? Will its own imperfections, and the changing currents of men's thoughts, not alienate from it a generation rendered fastidious by poetry of more artistic perfection, more highly coloured, more richly flavoured? Without speaking too confidently we should expect it to live on, if not in so wonderful esteem, yet widely read and deeply felt; for it makes its appeal to no temporary or accidental feelings, but mainly to that which is permanent in man. It can hardly be that it should lose its hold on the affections of English-speaking men as long as Christianity retains it. For if we may judge from the past, it will be long ere another character of the same rare and saintly beauty shall again concur with a poetic gift and power of poetic expression, not certainly of the highest, yet still of no common, order. Broader and bolder imagination, greater artistic faculty, many poets who were his contemporaries possessed. But in none of them did there burn a spiritual light so pure and heavenly, to make these gifts transparent from within. It is because *The Christian Year* has succeeded in conveying to the outer world some effluence of that character which his intimate friends so loved and revered in Keble, that, as we believe, he will not cease to hold a quite peculiar place in the affections of posterity.



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ART. I.—CONCLAVES.

MUCH as has been written about the Papaey, the subject of Papal Elections may hardly be said to have been touched. The reason thereof is very simple. The matter out of which alone their history can be constructed has been hitherto inaccessible. It lies buried in Italian archives; and Italian archives, especially in all that touched on Rome, have until recently been closed against inspection with systematic jealousy. In the libraries and archives of individual families, it is indeed often possible to glean an astonishing amount of historical information, which would be little looked for in these quarters, and from such sources Professor Ranke mainly drew his materials. It is surprising how much of the highest value for the historian has been deposited in the muniment-rooms of Italian families of distinction, whose ancestors held high posts. It would seem as if it had been the rule with those astute statesmen of former times to keep for their private use a copy of every important document connected with their official actions. But then these family collections are guarded for the most part with a jealousy not a whit less inexorable than that which until recently prevailed in regard to those of the State. In Rome, for instance, there are several family archives, about whose wealth in precious documents for the history of the sixteenth and seventeenth centuries there are traditions, but whereof no student—at least no foreign student—has ever been allowed to see more than the outside. Yet even these family archives would hardly furnish the information for a full insight into the various incidents which marked Papal elections, and caused then to turn in favour of

particular candidates. Every other historical event of the family ancestors would be illustrated rather than their doings in Conclave, because while in all other situations these stood more or less in the character of agents who could not avoid correspondence with their superiors, in Conclave every ancestral Cardinal was actuated with the feeling of a principal, and operated, not through the agency of a surviving instrument, but as much as possible through the impalpable element of colloquy and personal persuasion. To preserve tracings of such proceedings it required that a watchful looker-on should be in a position to take notes, which the chief actors had no interest in perpetuating. Now this is precisely what was done by the confidential agents whom each Italian sovereign kept about a Conclave. These agents were not mere news-mongers, ministering to a morbid craving for gossip in their reports; they were the selected secret instruments set craftily in motion to effect the election of their pet candidates by the ever-scheming individuals who ruled the various principalities of Italy, passing their lives in one perpetual exertion to supplant each other, to smite each other on the hip, and for whom to compass the elevation to the Papal See of a particular individual, at whose hands they had reason to expect personal advantage, was always a capital object of statesmanship. In the despatches of these agents to their employers can one alone expect to find the revelation of the crafty steps and counter-steps which, springing from no higher source than intrigue of the lowest stamp, have had memorable consequences, by lodging at critical moments the supreme prerogatives of the Papaey, and therewith the religious and political destinies of a large section of the hu-

man race, in hands that had too often no title to wield this preponderating authority beyond the favour and the successful craft of a patron. History presents no more astonishing spectacle than the contrast between the mean causes which have frequently decided the fate of Papal elections and the momentous issues that have flowed from them.

It is to be hoped that students will turn their attention to the great Italian Archives, which now are freely open to inspection, and furnish us with the documentary records for this interesting and unwritten portion of history. The richness of these all but virgin mines, of historical knowledge exceeds imagination; for jealousy, and vigilance, and intrigue were the three cardinal qualities that entered into the necessary constitution of Italian Princes, who therefore spent their lives in incessant correspondence with the agents of their cunning devices. But if it is impossible to recover the exact features of particular Conclaves until the curious contents of these archives are dragged to light, there are yet other points of interest bearing on the general subject of Papal elections, which, though enveloped in no denser mystery than some amount of intricacy, have been likewise very imperfectly treated—at least by writers with any pretence to popular style. The points we allude to have reference to the constitutional forms of a Conclave—the modes in which a Pope might be created, the provisions devised to meet the exigencies of an interregnum, and the forthcoming political prerogatives that are called into existence on the occurrence of a Pope's decease. An exposition of these various matters would furnish a complete view of the organization of the Holy See, for it is only during assembly for the creation of a Pope that the members of that See are in possession of their full powers. As an institution regulated by distinct laws, the Papacy exists only in the season of its creation; the moment it has been embodied it passes into the state of irresponsible incarnation, above all conditions, all liens, and all obligations. The privileges and provisions that authorize and limit the actions of a Cardinal are absolutely non-existing for him the instant he has been transformed into a Pope. The proclaimed Pope can at once decree, and suspend and abrogate, as he may please; but as long as there are only Cardinals in question, their liberties are secured to them by instruments that at the same time define and tie them down. An account of the state of things constitutionally created by the advent of an interregnum—of the chartered privileges and powers which can then come in question, and of the elements

that are recognised as legitimately qualified to intervene in the election of a Pope,—would accordingly furnish a bird's-eye view of the constitution of the Roman See. Here we should have a succinct abstract of the organic outgrowth—in all that concerns inward constitution—of that Roman See, as manifested upon its constituent members in faculties, which are so many commemorative marks of successive stages of development. An exposition of these circumstances could not fail to possess varied interest. It is not the antiquarian alone who would feel his curiosity attracted here to illustrations of historical incidents. The practical politician, living only for immediate interests, and absorbed in the desire of devising the means of satisfying them, might find much in a survey of this nature that may serve his purpose. For amongst the contingencies which the imagination of busy minds is fond of looking to, as likely to prove the occasion for working a solution of the angry problems which have divided the Court of Rome from Italy, none has presented itself oftener than that Conclave, which, in the ordinary course of human events, cannot be far off. The future Conclave has floated before the minds of many curious and anxious inquirers as an inevitable but mysterious fact—looming on the political horizon with perplexingly impenetrable certainty. Every one indeed feels that the Conclave which will assemble on the decease of the reigning Pope will be invested with unusual importance. Speculation is instinctively attracted towards this mystery of the future, which cannot possibly be avoided. It is not our purpose to attempt to cast our horoscope for the issue of the next Papal election—to venture on the impossible task of anticipating the sensitive and shifting elements of a personal nature that enter into the actual conformation of every Conclave; but what, at a moment like the present, would prove no less instructive than interesting, would be an accurate statement of all the circumstances and incidents which, according to prescription, might come into play during a Papal interregnum.

It will hardly be necessary to remind the reader that the existing mode of Papal election, by which the prerogative of naming the Supreme Pontiff is vested exclusively in those ecclesiastical dignitaries who have attained the rank of Cardinals, is a matter of comparatively late creation; and that for centuries, during the many political vicissitudes which, with frightful rapidity, came tumbling over Rome in wild confusion the election of its bishop, who was ever growing steadily in power, was fixedly lodged in a



joint action of the whole community, as falling into the three classes, of civil authorities, people, and clergy. Every other provision connected with public institutions was subjected to incessant revolution; but, amidst this endless influx of change and counter-change, it never occurred until the middle of the eleventh century to make the nomination of the Pope, in law, independent of the civil power, still less to lodge it in the hands of a select body of ecclesiastics, whose choice would be entitled to exact the homage of the clergy and people. It was the period when the Church, as represented by the dignitary who presided over the See of Rome, had drifted down the troubled stream of time, to find itself wedged in against the rocky mass of the Empire, hardened by centuries of high imperial traditions, and specially sharpened by the individual character of the vigorous princes of the Salic race, who then were its imperious representatives. The situation was one in which the timbers of the Church's barque must either push stoutly over obstacles to freer waters beyond, or else that vessel must inevitably wreck itself upon the jagged sides of the hard barrier against which it was jaumed. Such a predicament instinctively inspired a demand for increased motive power to the ecclesiastical machinery in the breasts of those who might not be disposed to acquiesce in a timid abandonment of the Church to its fate. It happened, by one of those coincidences which some call providential, and others organic, that at this conjuncture the destinies of the Church were lodged in the hands of men, and especially of one man, who were pre-eminently endowed with the instincts demanded by the moment. The commanding figure of Hildebrand looms before us grandly as the overshadowing genius of the Papacy during the eventful reigns of six Popes, by whose sides he stands as an unflinching counsellor and prompter, until at the culminating hour of time he chooses to seat himself upon that episcopal chair, which, mainly through his own fostering efforts, had then become actually transformed into a throne of power. It was Hildebrand who, taking advantage of public discussions in Rome, secured by adroit management the sudden nomination of Nicolas II. at Florence in 1058, and then induced his nominee to issue the Bull which must be regarded as the original charter of the College of Cardinals—the *Magna Charta* on which reposes the existing structure of that body—a deed of abiding importance for the constitution of the Roman See. By it the College of Cardinals was called into creation as an Ecclesiastical Senate, invested organically with

the elective franchise which can give a Head to the Church. What may have been before the peculiar prerogatives of the dignitaries bearing this title, is a point difficult to define with certainty; but what does not admit of doubt is that from the Bull of Nicolas II. dates first the organic consummation of a revolution that had long been working its way underground, by which the highest constitutional functions in the government of the Roman See came to be taken away definitively from the ecclesiastical body at large, and vested exclusively in this corporation. The preamble of the Bull rehearses succinctly the political causes which moved the Pope to issue the same—the troubles, namely, which supervened on the demise of his predecessor, and the great grief which the Pope felt at the sad consequences that had befallen the Church through a disturbed election. To obviate similar occurrences for the future, Nicolas II. solemnly decreed, therefore, 'that the election of Pope appertains first to the Cardinal Bishops who officiate for the Metropolitan, then to the Cardinal Clerks, and that the remainder of the Clergy and the People tender but their acquiescence in the election, so that the Cardinals have the lead in making choice of Popes—the others but following them.' The innovation thus ventured upon was two-edged. It was calculated to provoke at once the resentment of the tumultuous populace, civil and ecclesiastical, of Rome, that saw itself deprived of the privileges which practically it had enjoyed of actively sharing in the choice of a Pope, and of the Imperial Crown that had always claimed an influential, and generally even an absolutely controlling voice in such an election. To propitiate these influences Nicolas II. introduced two rather vague provisions. The Roman populace received the sop that the Pope should be selected in preference out of the bosom of the Roman Church, and only in the event of no fitting subject being there forthcoming, out of that of another congregation. The Emperor was sought to be conciliated by inserting the proviso, 'saving the honour and reverence due to our beloved son Henry, at present King, and who with God's favour it is to be hoped will become Emperor, as likewise to his successors, who may have personally acquired this right from the Apostolical See.' This reservation is memorable, for in after times it was often invoked in the conflicts between the Papacy and the Crown, while a quite recent historian, Gfrörner, has fallen into the mistake of making this special saving clause for soothing the Emperor's pride the origin for the privilege which certain

Catholic Powers at present still claim of applying a veto in Conclave against the election of some particular Cardinal.

The rights so conferred were exercised not without much contest; but it was not until after more than a century that the constitution so roughly hewn out received any further touches at the hands of Alexander III. This great Pope, the unbending antagonist of Barbarossa, and the protecting genius of the leagued cities of Lombardy, won his way to high position, through as various and persistent hardships as ever fell to the lot of any Pope. Of a reign of twenty-two years, during more than half of which Alexander was an exiled wanderer, eighteen were spent in the bitterness of a schism, which was perpetuated through three anti-Popes, and had commenced at the very instant of Alexander's elevation. At that conjuncture the leading divisions between Empire and Holy See had penetrated also into the College of Cardinals; and when those who represented the ecclesiastical party combined to proclaim Alexander with a clear majority, the leader of the Emperor's partisans, Cardinal Octavins, pulled away the purple as the new Pope was about to be robed, and had it flung over his own shoulders. Amidst wild tumult the Conclave was broken up, Cardinal Octavius borne in procession to the Lateran by his friends, and there installed Pope, while the rightful one, on being delivered from imprisonment by Odo Fragipani, fled away from Rome, and got himself hastily consecrated in the parish church of Ninfa, that wonderful forsaken town, which still stands, in the Pontine marshes, without one soul to dwell in it any longer, overgrown wildly with the rank vegetation of those luxuriant but pestilential regions, mirroring in the transparent waters of a hushed mere its church towers and frowning dwelling-houses and crenellated walls—the silent ghost in stone of the baronial life of the middle ages. It is very natural that a Pope who suffered so much from the persistent opposition of successive pretenders, backing their claims with an embarrassing show of canonical election, should have been deeply impressed with the necessity for surrounding such elections in future with safeguards against the recurrence of similar perplexing returns. Accordingly, when Alexander at last found himself the acknowledged victor in the struggle he had so long waged with undying spirit, he immediately convoked a Council in that Lateran Palace which was the official residence of the Latin Metropolitan, and therein caused a decree to be promulgated that no Papal election should be valid with a majority of less than two-thirds

of those voting,—a provision that has ever since remained in force.

It had thus been solemnly ruled that the power of making a Pope should reside with the Cardinals alone, and that no Pope could be legitimate except by the vote of two-thirds of the electors present; but as to any obligatory conditions of form to be observed in such election, little, if anything, had as yet been defined. On this head, as on the others, the organic laws that have definitively regulated matters were plainly dictated but by instincts springing out of practical experiences. The importation through the direct agency of the Papacy of a French dynasty into Italy, in the person of Charles of Anjou, led to the existence of two distinct parties in the Roman Curia; the one favourable to the French invasion, and composed of French elements; the other not exclusively Italian in composition, but yet by its feelings against Charles of Anjou representing the national sentiment. The inevitable consequences of this division were protracted and hotly contested elections, attended during the interregnum by a series of convulsions and tumults which reduced to a shadow the Papal authority in Rome. These lamentable circumstances reached a climax on the occasion of the Cardinals having to choose a successor to Clement IV., who died in Viterbo on the 29th November 1268, one month after the head of the last Hohenstaufen had fallen on a scaffold in Naples, at least with the assent if not by the direct complicity of the Pope. In Viterbo the Cardinals assembled—eighteen in number,—and for two years and nine months Viterbo became the point on which remained fixed the anxious gaze of Christendom, awaiting the nomination of its Spiritual Head. The scenes that occurred then at Viterbo were terrible. In vain did Charles of Anjou take up his residence at Viterbo in the hope of coercing the refractory Cardinals of the national party into electing a creature of his own. His presence only added fuel to the flames of this memorable contest. At last the burghers of Viterbo themselves rose in fury against an intolerable state of things, which bade fair to convert their city into the standing cock-pit for unquenchable passions, and made their streets the scene of daily bloodshed. Under the direction of the Town-captain, Rainer Gatti, the citizens proceeded to try the effect of physical hardship upon the party spirit of the Cardinals. The episcopal palace wherein they resided was stripped of its roof, so that the inmates became exposed to wind and weather. There is preserved a remarkable letter dated 'in Palatio discooperto Episcopatus Viterbiensis

vi. Idibus Junii MCLXX. Apost. Sede Vacante,' and addressed to the Podestà, the Town-captain, and the Commonalty of Viterbo by seventeen Cardinals, whose seals are affixed, in which it is requested that, on the ground of his sickness, free passage out of the palace in which they are shut up, be allowed to their colleague Cardinal Henry of Ostia, it being expressly stated that he has waived for this one occasion his right of voting. The careful insertion of this clause deserves attention, as proving that at this period it had not yet been definitively ruled that every Cardinal's active participation was not an indispensable condition for settling a Papal election beyond challenge. The sharp measures devised by the Viterbese proved, however, as the remonstrances of kings in making these stiff-necked prelates concur in the choice of a Pope. For more than a year longer did they quarrel and fight on amongst themselves, until at last, it is said mainly by the fervent words of the great Franciscan preacher Saint Bonaventura, they were induced to endow six out of their body with the absolute power of nominating a Pope, whom the others stood pledged to acknowledge. This is the earliest precedent we believe for a Pope made by the electoral process technically termed *Compromise*—a process that has been put in practice repeatedly, and which is still held not to have become obsolete. On the 1st September 1271, the choice of these six Grand Electors fell on Theobald Visconti, Archdeacon of Liege, and not a Cardinal, who assumed the style of Gregory x.—a man worthy of his august position, whose conscientious nature was painfully affected with a sense of the spectacle which the Church had been exhibiting during the interregnum. He at once called together at Lyons a General Council to regulate abuses, and make provisions for securing harmony in Christendom. The assembled fathers of the Church solemnly promulgated a Constitution wherein, with elaborate minuteness, are prescribed forms to be observed in Papal Elections, that were manifestly suggested by the sad occurrences of the last Conclave, and the desire to establish safeguards against their recurrence.

As the Constitutions of Nicolas II. and Alexander III. are the fundamental instruments for the organic powers of franchise vesting in the College of Cardinals, so must that of Gregory x. be held to be the fundamental instrument for the ceremonial which has come to be observed on the occasion of Cardinals meeting in Conclave; for the modifications that have been introduced affect only points of detail. In this mem-

orable decree the principle was first laid down of locking up the Church's electors, with the view of shutting out the action of secular influences. It had before happened that Cardinals suffered imprisonment at the hands of violence, but now it was decreed that they should always be immured as long as they were engaged in the sacred avocation of creating a Pope. It was ruled that on a Pope's decease ten days must be allowed to elapse before his successor could be chosen, with the view of giving time for Cardinals at a distance to come to Conclave; on that tenth day the Cardinals present could proceed to an election, the legitimacy of which could not be impugned on account of the absence of any colleagues. Meeting in the very palace wherein the Pope died, in the event of the decease happening in the city which was the seat of the Papal Court, the Cardinals were enjoined that they might be accompanied only by one attendant each, unless for particular reasons in individual cases a special permission for two were conceded; they were to inhabit one hall in common, without any division in the shape of wall or hanging, and so closed on all sides that no one could get in or out; excommunication was to be incurred by whoever should presume to look in upon the Cardinals while engaged in their electoral labours, although it was lawful, by general consent of all the assembled Cardinals, to confer with a person without, whom it might be deemed necessary to see in reference to matters appertaining to the election. One window alone should be opened upon this hall of assembly, of sufficient size to admit the necessaries of life, it being expressly prohibited, under the aforesaid pain of excommunication, that this aperture be ever used for letting pass in any human being. Should it happen, 'which God forefend,' that no Pope be chosen within three days, the cardinals should then be restricted to one dish each at dinner and supper during the next five days, and if after that the chair of St. Peter be still vacant, they should be furnished during the remainder of their stay in Conclave with bread, wine, and water alone; nor should it be lawful for a Cardinal to profit by any benefice falling vacant during the interregnum, or to draw any revenue from sources appertaining to the Pontifical Chamber; and no Cardinal could be re-admitted who had left the Conclave for any reason except stress of health, although its doors were to be opened to the same on recovery from sickness, and to every Cardinal who arrived after commencement of the election, it being expressly decreed that in neither case could absence invalidate aught that had been done during the time.

If the Pope's decease occurred away from his established residence, the Cardinals were to assemble in the city, or the region dependent on that city in which he had died, except in the case of these localities being under interdict; and finally, the faithful observance of these provisions was intrusted to the guardianship of the civil authorities of the locality in which the Conclave met, under penalty of incurring excommunication for neglect of this duty. Taken together, these three Constitutions of Nicolas II. (1059), Alexander III. (1179), and Gregory X. (1171), comprise all the essential features in the mechanism which is now still in force at Papal elections. In the last quarter of the thirteenth century the Pontifical Court had then definitively attained its present organism, and slid into the groove in which its wheels have since run.

Once only has there been a memorable innovation upon what may be considered as the principles embodied in these prescriptions. This happened on the occasion of the Papal election which ensued in consequence of the resolutions arrived at in the Council of Constance. The Church of Rome has never since been exposed to trials of the same nature as those from which she delivered herself by the intervention of this Council. She has indeed been subsequently confronted by difficulties of no slight order, but these have all preserved the character of an external origin, whereas then the Church was racked by inward throes convulsing her very heart. Until such time as a sentence of reversal, accompanied by deliberate rejection of this precedent in the emergency of an analogous crisis, shall have been pronounced by the Church against what then was done, this incident must be taken therefore in evidence of what the Roman Establishment would hold it to be not contrary to its principles to sanction, in the event of equally critical circumstances coming once more into play. The Council of Constance is distinguished from every other Council by its convocation having been due, not to the individual impulse of a Pontiff as a part, but to the spontaneous instinct of society in general, exhausted by the evils flowing from the great schism, and panting for repose from confusion and discussion. All the landmarks of legitimacy had become removed, and an Egyptian darkness enveloped society, when rival pretenders to the Papacy circulated freely in the world without its being possible to arrive at a conclusion who was legitimate and who was spurious. Against such a bewildering state of things the conscience of the Church instinctively rose, and the Council of Constance is the act of this

uprising by the Churchmen of the day, in rescue to the institution they cherished, from what they felt to be exceptional evils requiring exceptional remedies. Accordingly, in this assembly, which restored peace to the Church, and the proceedings of which have been recognised without protest as legitimate by the authorities of the Church, two Popes, who then divided the world—John XXIII. and Gregory XII.—and whose elections, let it be borne in mind, were originally so unimpeachable in form that they have both continued to figure as Popes on the list put forth by the Roman Church—were solemnly compelled to abdicate (1415), and in their stead a new Pope, Martin V., was created by a special constituency formed for that occasion, so as to secure for him a broader title than under the deplorable circumstances of the schism could be furnished by Cardinals alone, all of whom had more or less participated actively in its incidents. It is this acknowledgment of the necessity of special measures for special situations, and this dispensation from a pedantic observance of specified forms, when felt to be hurtful to vital interests—a dispensation which has been ratified in the unhesitating acknowledgment by the Church of what was done on this occasion,—which renders the election of Martin V. a most memorable event. At this time, the exclusive prerogative of the Cardinals to provide a Pope had been in force nearly four centuries without challenge. All popular memory of those other rights of franchise which once existed had quite passed away. No antiquarian reminiscences weighed with the assembled divines, but simply the living instinct of what was demanded by the gravity of the moment, too great to be trifled with, and by the claims of interests too important to be sacrificed from a rigid spirit of formalism. Accordingly, the Council constituted an especial electoral college, composed of the Cardinals and thirty divines, selected from out of its members, five from each nation present, who together could represent the genuine conscience of the Church; and these were able to supply a Pontiff who could appease the troubles which had so long afflicted Christendom. The measure was distinctly proclaimed exceptional, and explicitly limited to a particular occasion, whereby its importance as a precedent is heightened; for this involves the principle that the Church considers itself free to invent new forms, which their adoption may seem advisable for meeting the exigencies of particular times. The Roman *Bullarium* contains, indeed, a string of Bulls subsequent to the three we have mentioned, that bear on Papal elections, but where they

do more than solemnly confirm the above, they deal with matters of quite secondary importance, modifying points of mere detail. No new organic principle has been imported into the machinery of Papal elections since the days of Gregory x. The only subsequent Pontifical utterance on this subject that can lay any claim to the importance of an organic law, is the bull issued in 1621 by Gregory xv., and which was followed in the year after by an elaborate injunction of ceremonial, which is the one still observed. To go through these successive enactments in their chronological order would, however, be merely to run through a wearisome catalogue, without any but a dry antiquarian interest. Our object is not to inquire what may have been the particular forms and practices embodied in the Roman Court at each period, but what are the powers and forces that come into play in its present organisation; and to this end it will be enough if we confine our notice of Papal enactments to such points as may incidentally stand in connexion with, or tend to serve in illustration of, the practices and regulations which at the present day are still in force.

As soon as the Pope's state of health indicates imminent dissolution, the duty devolves on the Cardinal Secretary of State to communicate with the Dean of the Sacred College, that he may summon his brother Cardinals to hasten to the dying Pope's residence, and with the Cardinal Vicar, whose functions are those of Prefect of the ecclesiastical police in the city of Rome, that he may issue orders for offering up public prayers in the churches. Upon the Cardinal Penitentiary, who is the official depositary of the specifically spiritual powers vested in the Pope, falls the obligation of attending him in the last moments, along with his Confessor. When decease has occurred, the fact is immediately notified to the Cardinal Camerlengo by the Secretary of State, who then divests himself of his office, which remains in abeyance until the Cardinals have actually entered the Conclave, when they nominate a secretary, who is, however, not one of themselves. The Cardinal Camerlengo is in precedence one of the highest functionaries in the Roman Court, and figures prominently on all State occasions during the interregnum. He is considered to represent the dignitary who in the earlier times was entitled *Vestiaris*, and had in charge the stewardship of the Church's properties. Down to very recent times the Cardinal Camerlengo continued to be a very powerful, probably the most powerful personage next to the Pope, in the States of the Church; for within his attributes fell the administration of whatever stood

connected, however remotely, with the interests of the Papal Exchequer; while he was besides possessed of immediate jurisdiction over all secular cases in the city and district of Rome. But that process of functional centralisation which has gradually reduced the official organisation of Rome to a Pope and a Secretary of State has deprived the Camerlengo of the realities of greatness, and left him a mere lay figure of his former self. Instead of being, as once he was, a dictator for the time of the interregnum, the real King of Rome during the interval between the death of one and the creation of another Pope, whose authority was actively invoked to secure the peace of the city at that season, and did effectively intervene in the course of general government at all periods, the Camerlengo is now confined to the exercise of mere ceremonial, and the hollow display of a dumb show of authority. From the moment, however, that the Pope has breathed his last, he figures as the first man in the State, and during the days before the Conclave can be constituted, as its direct representative, inaugurating the exercise of his provisional powers by a truly quaint piece of ceremony, the symbolism whereof is obscure. At the head of the *Chierici di Camera*, the Camerlengo hastens to hold an inquest on the reported demise of the Pope. Proceeding to the death-chamber, the Cardinal strikes the door with a gilt mallet, calling on the Pope by name. On receiving no reply, he enters the room, when he taps the corpse on the forehead with another mallet of silver, and falling on his knees before the motionless body, proclaims the Pope to be in truth no more. It is after this that he forwards to the Senator the notification for the ringing of the great bell in the Capitol, which is to announce to the Romans that their Sovereign has died. This bell, which is tolled only on this occasion and on the opening of the Carnival, has a curious history. It was originally the communal bell of Viterbo. Between this city and Rome a fierce enmity prevailed in the twelfth century, which after hot conflicts ended by the overthrow of the Viterbese in the year 1200. By the terms of capitulation, the Romans carried off, as trophies and signs of supremacy, besides the recovered bronze gate of St. Peter's, which the Viterbese had captured in 1167, a chain and city gate key, which were suspended at the arch of Gallienus, and the communal bell, which from that time has been hung in the Capitol. It was surnamed *La Paterina*, a denomination which has been derived, with apparent foundation, from the *Paterini*, Viterbo having been notorious for harbouring a quantity of these sectarians.

From this moment the whole machinery of Government is suspended, and remains so until the creation of a Pope calls it again into activity. For all purposes of administration Rome is as it were placed under sequestration. Even the law courts suspend their sittings, and in every branch of the Executive there is left only that amount of activity which is indispensably requisite to prevent the absolute dissolution of society and order. This state of things proceeds from strict limitations imposed by Papal decrees upon the provisional authorities called into existence during the interregnum—limitations that were devised with the view of removing temptations to spin out the tenure of provisional office. Systematically the jealousy of the popes has carefully circumscribed the powers to be exercised during a vacancy of the Papal Chair until they have become stripped of all serious initiatory faculty, and extend only over the merest matters of indispensable routine. Of this the pomp and glitter devolve, as we have said, chiefly on the Cardinal Camerlengo, who forthwith receives from the *Maestro di Camera* the late Pope's piscatorial ring,\*

\* The ring is called so from having engraved on its stone the figure of St. Peter drawing in his fisherman's net. According to Cancellieri, '*Notizie sopra l'Origine e l'Uso dell' Anello Piscatorio*, Rome, 1823,' the earliest record of its use is of the year 1265. Originally it was nothing more than the Pope's private signet for his own correspondence. From the middle of the fifteenth century its use became reserved to the pontifical utterances called Briefs, and has remained so ever since. The distinction between a Brief and Bull lies in a degree of weight and solemnity. The Bull is the most authoritative expression of the pontifical infallibility, as such almost incapable of repeal; while the Brief is directed to something of comparatively immediate and passing importance. The name of the former comes from its leaden seal, which is tied by a hempen cord to bulls of ordinary import, and by a silken to those conferring sees, and containing matters of grave weight. The style of the Bull runs always—'Pius IX. Episcopus Servus Servorum Dei ad futuram' or 'perpetuam rei memoriam,' with date from the Incarnation, and signature of the various functionaries of the Apostolic Chancery, the document being written in Latin in mediæval letters upon dark rough parchment. A Brief, which is likewise in Latin, has but the Pope's name at the beginning—'Pius Papa IX.'—is signed by the Cardinal Secretary of Briefs, bears date from the Nativity, and is written in modern letters upon soft white parchment. The die of the leaden seal affixed to Bulls was kept at the Vatican until Pius VII. solemnly deposited it at the Cancellaria with pain of excommunication against whoever enters without express permission the room in which it is. At one period the Cistercian Friars had the privilege of furnishing the keepers of this seal. There is yet a third form of Papal expression in writing, called a Chirograph, the exact nature of which it is difficult to define. It appears indeed to have no binding force except what it may derive from personal

which is broken at the first general meeting of Cardinals, held on the day immediately following the Pope's decease. His next duty, after consigning the corpse to the care of the penitentiaries of the Vatican Basilica, is to take an inventory of all objects in the Apostolic Palace, a very natural proceeding, and deserving notice only because it owes its origin to the office customary riots in Rome during an interregnum, when it was an established thing for the mob to rifle the Pope's Palace. To guard against the illicit removal of pontifical property, the Camerlengo stays therefore in the palace until all has been properly registered, when, carrying away the key of the Pope's apartments, he returns in state to his private residence, his carriage being escorted by the Pope's particular body-guard of Swiss halberdiers, which continues in attendance on him until the election of a new Pope. Also all edicts issued during the interregnum run in his name, and the coin struck by the mint has on it the Camerlengo's private arms. And here at this early stage we already meet the checking contrivances invented against the possibility of some ambitious Cardinal usurping what is due only to the Pope. As soon as the Camerlengo has reached his dwelling he sees three Cardinals arrive—the senior members of the three classes in the Sacred College, bishops, priests, and deacons—who, during the nine days that are prescribed to elapse before a Conclave can be constituted, remain associated with him in a special congregation representing the Executive of the State.\*

The prerogatives of this Board are, however, again carefully limited to carrying out the resolutions taken by the general assembly of Cardinals which meets each day for the transaction of business that is laid down and defined with extraordinary minuteness. It comprises the arrangements for the Pope's funeral, the preparatory disposition for getting the Conclave ready, and the nomination of various officers specially charged with duties either in the Conclave or for securing the peace of the town. Most of the great functionaries in the Court of Rome hold their offices only for the Pope's lifetime. His decease produces therefore an instantaneous absence of authority which

respect for its author, and resembles in authority somewhat the minutes which at times are drawn up in our offices, or the peculiar expression of Royal injunction in Prussia termed *Kabinetts-order*.

\* From the moment Conclave is opened, and during the whole of its duration, the Executive authority is vested in the Camerlengo, assisted by three Cardinals called *Capi d'Ordine*, who are chosen by ballot for three days.



the Cardinals have to make good; and in former times, when tumults were the order of an election season, the appointment of the military officer—who, with the title of Lieutenant of the Holy Church, held the Castle of St. Angelo, and together with the Bargello, the chief of the city police, the Sbirri, had the duty of preserving order in the town, and of protecting particularly the Trasteverine quarter, where lies the Vatican, in which Conclaves then met—was a matter of very great importance. On all these points the Board, at the head of which figures the Camerlengo, has no power of initiative, while the general assembly is itself bound by prescriptions, the painful minuteness of which is conclusively illustrative of the spirit of formalism pervading the whole system. For each of the nine preliminary days there is an enjoined assembly of Cardinals that is limited to go through the form of some minutely prescribed bit of ceremonial mechanism, not to be departed from, not to be exceeded, not to be innovated upon. Every attribute of these assemblies is rigidly fixed and circumscribed. Here we have the unmistakable impress of generations of jealous Popes, who have been assiduously at work in hammering out a system into such elaborately fine points as must preclude the possibility of their being twisted into other shapes that might be turned against the perfect absoluteness which Popes will allow to reside only in themselves. ‘During the vacation of the See,’ says Pius iv., in a Bull that is inserted in the last official collection of regulations in force during an interregnum, ‘in those things which appertained to the Pope when alive, the College of Cardinals can have no power or jurisdiction whatever, whether of grace or justice, or of giving execution to such resolutions of the deceased Pope; but it is bound to reserve them to the future Pope.’ There is an explicit prohibition against this body assuming to dispose of any of the properties of the Church, or any of the moneys belonging to the Apostolical Chamber or to the Datary’s office, even for the discharge of debts contracted before the late Pope’s death, its power over the coffers of the exchequer extending merely to the maintenance of the functionaries constituting the Papal establishment, and the payment of what may be required for the ‘defence of the lands and places of the Church.’ It is only on the occurrence of what may be deemed ‘a grave peril’ by at least two-thirds of the Cardinals assembled that the Sacred College can be dispensed from a literal observance of these

limitations upon its prerogatives, and proceed to adopt such resolutions and measures as may seem to it demanded by circumstances.\* The faculty contained in this provision is of moment, and not to be overlooked. The more one studies the regulations of the Court of Rome, the more will one be impressed by the fact, how, athwart all the dense accumulation of punctilious formalism which has been the aggregatè deposit of a current setting in the same direction for centuries, there is yet preserved an element of subtle elasticity that has been shrewdly cherished in secret against the event of the force of altered circumstances making it some day desirable to seek protection in what has been so jealously suppressed and scouted in ordinary times—liberty of individual initiative.

Now-a-days Rome wears during an interregnum no great outer look of change—all going on pretty much in the same steady order as before. But formerly the case was very different. ‘Let not him say that he has been in Rome who has not happened to be there during the vacation of the See,’ are the words of a contemporary who wrote a narrative of the Conclave which, in 1621, resulted in the election of Gregory xv.† Down to comparatively a quite recent date entry upon an interregnum was synonymous with entry upon a period of riot and brawl, which made the streets unsafe for quiet citizens. Every kind of misdemeanour revelled at this season in Rome, which became for the time a perfect bear-garden, in which the criminals let out of jail enjoyed themselves mightily at the expense of peace-loving folk. The lawlessness which then reigned in Rome was a recognised order of things, consecrated by custom, and looked upon as a prescriptive right during the period of Conclave, just as the right of mummery during the Carnival season. The origin of this strange state of things must be sought in the general want of discipline that distinguished the armed force kept by States in the middle ages, and especially in that kept by the Pope. The trained bands were so many bodies of mutinous and lawless brawlers, who seized every opportunity for indulging their natural disposition to insubordination, outrage, and crime. Their pay as a rule was terribly in arrear, and therefore they hardly ever failed to begin operations on the

\* These prescriptions are repeated almost word for word in the Bull *Apostolatus Officium* issued in 1732 by Clement xii., the latest Papal statute on the subject of Conclaves.

† This manuscript is in the possession of Signor Carinci, the excellent archivist of the Duke of Sermoneta.



decease of a Pope by a mutinous demand to have their claims settled, or they would do no duty. These men, swept together from all corners, true mercenaries and adventurers of the purest water, were the dread of all classes—of the Cardinals, who could not dispense with their services, and had to buy their good humour;—of the townspeople, who were at the mercy of their recklessness. The natural consequence was that during an interregnum Rome wore the look of a city armed for civil war. Every noble in self-defense assumed the privilege of arming his retainers and drawing chains across the street in the neighbourhood of his palace, which was garrisoned by his followers, and converted into an asylum: he usurped the right of keeping his own quarter of the city free from all police but his own. Some of the great families succeeded in obtaining a recognition of this claim, like the Mattei, who had the right to hold the bridges of San Sisto and Quattro Capi, together with the intervening region of the Ghetto, with retainers wearing the badges of their house.\* But in most cases the authority exercised by the various magnates was only the outflow of an all-pervading spirit of license and tumult, that wrested as much power as it could, without any warrant for the peculiar pretensions advanced. The nominal police of Rome was vested in two officers, who, to add to the confusion, were traditionally jealous of each other's authority—the Bargello, who was the ordinary head of the regular city police, the Sbirri; and the Lieutenant of the Holy Church, who, as commander-in-chief of the soldiery, and special governor of the Leonine city, held office only for the period of interregnum. The particular duty intrusted to his charge was to secure the Cardinals from molestation, and to this end it became customary to erect barricades at the limits of the Leonine city, whereby the free circulation through it was prevented, except for those armed with a special permit.

One of the most riotous elections on record is that of 1623, when Urban VIII.—Barberini—was raised to the chair of St. Peter. The disturbances which then happened are stated by the contemporary diarist Gigli to have been such 'as no one could remember having ever witnessed.'

'Not a day passed,' he writes, 'without many brawls, murders, and waylayings. Men and women were often found killed in various places, many being without heads, while not a

few were picked up in this plight who had been thrown into the Tiber. Many were the houses broken into at night and sadly rifled. Doors were thrown down, women violated,—some were murdered, and others ravished; so also many young girls were dishonoured and carried off. As for the Sbirri, who tried to make arrests, some were killed outright, and others grievously maimed and wounded. The chief of the Trastevere region was stabbed as he went at night the rounds of his beat, and other chiefs of regions were many times in danger of their lives. Many of these outrages and acts of insolence were done by the soldiers who were in Rome as guards of the various lords and princes; as happened especially with those whom the Cardinal of Savoy had brought for his guard, at whose hands were killed several Sbirri who had taken into custody a comrade of theirs. In short, from day to day did the evil grow so much, that had the making a new Pope been deferred as long as it once seemed likely to be, through the dissensions of the Cardinals, there was ground to apprehend many other strange and most grievous inconveniences.'

Against such an all-pervading spirit of lawlessness it was a very inadequate provision for making the streets safe at night that every householder was bound to hang out a lamp before his dwelling during the period of an interregnum. Even now Rome is, of all capitals in Europe, the least pleasant to walk about in the dark; but scandalously unsafe as its streets are, their condition is yet a very pale copy of the state they were habitually reduced to, as it were by privilege, during the pandemonium season of former Conclaves.

Pius IV., a Pope of a certain reforming vigour, issued in 1562 a long Bull, repeating older regulations for a Conclave that seemed to require being called to mind, and forbidding a variety of abuses which had cropped up. The twenty-first clause runs thus:—Also we forbid wagers, *quas excommisas vocant*, being made on a pending Papal election; and decree that if against these presents any should yet be made, they shall be held and deemed altogether null and void in court, and out of the same; and that those thus contravening, and their brokers, be punished as it may please the Governor and the future Pope. It will create surprise to find such an injunction amongst the matters considered worthy of particular attention by a Pope when making regulations for the election of his successors. An explanation for the importance here attached to what would seem so irrelevant is to be found in the incidents that came habitually to attend these bets. At one time they grew to be in Rome what the odds given at Tattersall's are with us—a

\* At the corner of the streets running along the Mattei Palace there can still be seen the stone posts and rings for drawing chains during Conclave times.

matter involving considerable interests,—occupying whole classes, and producing a standing excitement. The gambling propensities prevalent amongst Italians seized upon the conflicting elements offered by a Conclave to reduce them into a series of chances on which to stake. The shopkeepers and merchants of Rome entered into the game with a passion which resembled our modern habits of speculation in stock. As soon as ever a Pope had breathed his last, Banchi Vecchii, and Nuovi—streets still bearing these names, and running from the small square in front of the bridge of St. Angelo—became an improvised Exchange, where the rival chances of candidates were publicly quoted and eagerly discounted, amidst commotion that commonly was attended with riot. This locality was the Fleet Street of Rome. Here resided the chief merchants, especially the goldsmiths, from whom the quarter derived its name; for in Rome, as elsewhere, the goldsmiths did business as money-brokers and bankers, figuring as the natural agents and go-betweens in all money operations.\*

The Bull of Pius iv. was not sufficient to arrest the betting propensities of the inhabitants of the Banchi; and in spite of Papal fulminations, the chances of an election were still made the subject of wagers that led to frequent breaches of the peace. Amongst the many valuable papers preserved in the Gactani archives, there is one which is singularly illustrative of what used to occur in this quarter. It is the report by the Duke of Sermoneta, who in the interregnum of 1590 was the Lieutenant of the Holy Church, of the circumstances that led to a murderous scuffle between his own soldiers on guard in the Banchi and a patrol of the city sbirri. By right the Banchi lay within the bounds of the Bargello's authority, but at the request of the shopkeepers the Lieutenant had posted a watch of soldiers in this street. Here he had refused, it was said by mistake, to let pass a round

of Sbirri, whereupon the Bargello had hurried in person to the spot to assert his authority, but the soldiers laughed to scorn his pretensions, and a scuffle ensued, with a discharge of firearms, which killed several individuals. The Bargello beat a retreat into the palace of the Governor of Rome, while the Duke, who happened to be standing at the Castle gate when the tumult occurred, hasted across the bridge to appease it, and draw off into the Borgo his riotous soldiers. In his report he then recommends measures to prevent the recurrence of such scenes, and states the cause that lay at their bottom: 'I have sent,' he writes, 'another company to be in guard at the Banchi; but it may be deemed advisable, on account of what has happened, to remove altogether this post from there, as the brokers and dealers wish and ask for the same only because it affords them protection for laying their wagers, and they are the parties who sow dissensions between soldiers and Sbirri. . . . If this guard were taken away from the Banchi, the Bargello would then be able to pass there freely, and thus a stop would be put to these wagers, from which proceed all these riots.' Now-a-days this mode of making a Papal election subserve the general love for play has been superseded by the system of the lottery; and whereas formerly heads were often broken in the angry excitement caused by the daily rise and fall in the rival chances of favourite Cardinals, the population of Rome at present during an interregnum satisfies its gambling passion by peacefully playing on combinations of numbers formed out of the ages of Cardinals, or any other circumstances connected with their individualities which human ingenuity may be able to translate into a cabalistic expression.\*

\* When Benvenuto Cellini plied his calling in Rome he had his workshop in this locality; and it was while sitting in it—probably a dark vaulted chamber in the ground-floor of a palazzo, with an arch on the street to serve at once as door and window, such as are many shops in the older portions of Rome—that he was affronted by the insulting gestures of the goldsmith Pompeo, who, swaggering down the street, and infected with the licentious spirit of an interregnum season—for this happened when the Cardinals had just entered Conclave,—drew up opposite Benvenuto's shop, and insolently flouted the hot-blooded Florentine, until, unable any longer to check his passion, he bounded out after Pompeo, and stabbed him to the heart for his sauciness.—See Cellini's *Autobiography*, book i. chapter xv.

\* It is proverbial that in Italy nothing is sacred from conversion into some reduction into numbers that are made available for the lottery. It is not the public alone, but the Conscript Fathers of the Church themselves, who during Conclave time contrive to indulge their gambling passions in numbers that are considered to represent the mystical operations of the Holy Ghost. Stendhal, who gives a very capital account of the Conclave in 1829 in his *Promenades dans Rome*, has a good story of his witnessing some inmate of the Conclave playing in the lottery through the wheel which serves for conveying meals in: 'Just as after the inspection of two or three dinners all this kitchenwork bored us,' he writes, 'and we were on the point to withdraw, we saw a ticket come through the turning-wheel from within the Conclave, with the numbers 17 and 25 thereon, and the request to put it in the lottery. . . . These numbers might signify that in the morning's balloting the Cardinal occupying apartment 25 had 17 votes, or any other combination. These numbers were faithfully handed over to a servant of Cardinal P.—'

A Bull of Clement XII. (1730-40), impregnated with the spirit of economy, abolished, together with a number of offices, the Governorship of the Leonine city. The reforming hand of the age, quickened by the prickings of inexorable penury, has been successfully engaged in paring down the old-fashioned lavishness of even arch conservative Rome. At present the peace of the Popeless city is left entirely to the care of Monsignor Governatore, who with drilled gendarmes in modern plight has superseded the once rival powers and fantastic archers of the Church's Lieutenant and the civic Bargello,—ruling Rome during an interregnum by the same grim intervention of prowling police that is ordinarily busy in its streets when an actual Pope resides in the Vatican. One vestige alone still figures of the peculiar powers which started into existence at the beck of necessities now happily vanished. It is to be found in the pomp and parade that attend the Marshal of the Conclave,—an officer who is a member of the great Roman aristocracy, and whose professed duty is to be the jailer of the assembled Cardinals, having it on his conscience to keep them tightly shut off from contact with the outer world. In reality, this dignity is now become an appanage of the Chigi family, though, in strictness, not hereditary, the office being conferred afresh for life on each new head of the house. The origin of the creation dates from the troubled period of Gregory X.'s elevation (1271). Innocent VI. (1352-62) bestowed the office on the member of the great Savelli family, which from father to son retained it until in 1712 this house became extinct, having held the dignity always by the same tenure by which it now descends in the Chigis, on whom it was conferred at this period. Once the authority attached to this office was very considerable, and not confined only to the season of interregnum, for the Marshal possessed jurisdiction over all lay members of the Pontifical Court, who were tried before his special tribunal, the Corte Savella, and lodged in his special prison. That privilege came to an end under Innocent X. (1644-55) in whose edict of suppression the grave abuses prevalent in that Court, and the scandalous state of the prisons, are especially alluded to as rendering reform indispensable. In spite of these curtailments of his powers, the Marshal retains all the outward display of high rank, and figures during a Conclave as second in precedence only to the Camerlengo. The essence of his importance has indeed much waned; about the only real exercise of authority which he may yet be called upon to put in practice being the legitimate dis-

tribution of pass-medals, which the Marshal is entitled to get coined in silver and gold. Nevertheless, in the ceremonial pageant of Rome, this dignitary makes a prominent show, although his splendour has not escaped the paring action of that spirit of reduction which has been in the ascendant of late. The *Diario di Roma* of the day gives a glowing description of the sumptuous magnificence displayed by the first Marshal of the Chigi family on his first appearance in this capacity after the death of Clement XI. in 1721:—

'Before his palace in Piazza Colonna there was drawn up his company of hundred men enlisted and clothed in blue cloth at the Prince's own cost, together with their officers. Then there went to attend his Excellency a company of fish-venders, clothed in gala, in white and blue calico, and white feathers in the hats, with borders, after which come a troop of rosary-makers, and then another from the quarter of La Regola, and these going in a body before the great standards with his Excellency's arms, marched along the whole Strada Papale to St. Peter's, and mounted guard at the Prince's own apartment, which is at the great staircase of the Vatican Basilica.'

During a conclave, the Marshal still takes up his quarters in the building where it meets, and just outside the barriers that shut in the Cardinals, to watch over whose strict confinement, and to inspect the unimpeachable nature of the articles passed through the turning-wheels for the admission of really indispensable objects, constitute the only duties he still has any pretension to perform. The thrifty spirit of Clement XIII. (1758-69) included the gay bands of retainers amongst the items suppressed by his reforming Bull, so that now the Prince-Marshal has a less ostentatious, but also a less costly guard, furnished by a contingent of Papal regulars.

It would be tedious to recount the prescriptive ceremonial for each of the nine days of preparation before entering Conclave. The first three are more particularly devoted to the obsequies of the Pope, which take place always at St. Peter's—the chapel of the Pontifical residence, and are marked by many striking rites, full of obscure symbolism, and quaint mementoes of obsolete customs. Stendhal, who was in Rome at the death of Leo XII., and curiously followed the ceremonies of the interregnum, gives in his *Promenades* an excellent account of what is still practised:—

'To-day the obsequies of the Pope began at St. Peter's,' he writes, 'and we were there from eleven in the forenoon. The Pope's catafalque has been raised in the Chapel of the Choir, surrounded by the noble Guards in their handsome scarlet uniforms. The body of the

Pope is not yet there. Before the catafalque a high mass was read. It was Cardinal Pacea who officiated as sub-dean of the Sacred College.

. . . After mass, the Cardinals withdrew to govern the state; their sitting took place in the chapter-hall of St. Peter's. . . . While the Cardinals were busy governing, the clergy of St. Peter's went to fetch the body of Leo XII. in the chapel where it was exposed; the *Miserere* being chanted. The corpse having been borne into the Chapel of the Choir, the Cardinals returned. The corpse was splendidly robed in white; with great state was it placed, in strict conformity to a very intricate ceremonial, within a shroud of purple silk, ornamented with embroidery and gold fringe. In the coffin were three bags filled with medals, and a parchment scroll, wherein was the history of the Pope's life. The curtains of the great gate of the chapel were drawn, but some favoured foreigners were clandestinely smuggled into the singers' tribune.'

Stendhal adds the remark, 'that a well-founded spirit of suspicion pervades everything that happens on a Pope's demise; for the poor deceased has no relatives around him, and those charged with providing a successor might possibly bury a Pope alive.' The deathbeds of many Popes have indeed witnessed shocking scenes of destitution and abandonment, coupled with outrageously indecent treatment of the corpse. What can be more lurid in its effects than the sacrilegious brawl, by torchlight, over the dead body of Alexander VI. (1504), between drunken soldiers and priests, within the hallowed area of St. Peter's, just before the very altar, as it is drily described by Burekhardt?—'By four beggars was the corpse borne into St. Peter's, the clergy, according to custom, preceding, and the canons walking by the side of the bier, which being set in the midst of the church, they stood awaiting the *Non intres in Judicium* to be said, but the book could not be found, wherefore the clergy began singing the response *Libera Domine*. While this chanting was going on in church, some soldiers of the palace guard laid hold of and snatched the torches from the clerks, whereupon the clergy defended themselves with the torches in their hands; and the soldiers made use of their weapons, so that the clergy becoming frightened, rushed in a body into the sacristy, leaving off their chant, and the Pope's corpse remaining by itself. I and some others took up the bier and carried it before the high altar.' Happily there is no record of any other scandal of equal magnitude, but yet the funerals of many Popes have been attended by circumstances of a painful nature, in glaring contrast with the eminent rank of the individual who was being borne to his grave.

By the ninth day everything requisite for

proceeding to business must have been arranged, and the Conclave must be ready to receive its inmates, and these must have been selected. For a Conclave comprises a population all locked up in attendance upon the possible wants of their immured Eminences. It would take a page to give a list of all the different classes of functionaries and servants who have to share the privileges of this imprisonment,—from the Maggiordomo to the Father Confessor, and from the Head Physician down to the Barbers and Carpenters and Sweepers. All these classes are carefully indicated in grave Papal rescripts, as also the exact number in each which it is allowable for a Conclave to contain; the nomination always resting with the general congregation of Cardinals, except in the case of the Conclavists who are private secretaries to the Cardinals, and therefore selected by their patrons within specified limitations. These Conclavists have often played a most important part in Papal elections, many of which have owed their issue to the adroit practices of these subaltern agents. The position of a Conclavist is therefore confidential and influential.\* Each Cardinal may be accompanied by two, who must neither be engaged in trade, nor the stewards of princes, nor lords of a temporal jurisdiction, nor the brothers or nephews of their patron Cardinal, in whose household they must have been domiciled for a twelvemonth before. The feeling of jealous precaution which is plainly dominant in all these regulations, has caused their conditions to be carefully observed. In 1758 Cardinal Malvezzi attempted to smuggle in a favourite Canon Bolognini, and underwent the mortification of seeing him denied admission by the Sacred College, on the ground of his not having been a *bonâ fide* member of the Cardinal's household for the prescribed period, and its being therefore apprehended that he had been elected for the purpose of serving as the instrument to promote particular influences. On this occasion another curious exclusion was witnessed. The appointment of Physician-in-Chief was about

\* The obligation of *secrecy* is as incumbent in law on the Conclavists and officials as on the Cardinals. In 1829 the violation thereof was visited with public expulsion and imprisonment. 'A Conclavist (I believe the one of Cardinal Ruffo Scilla) and a porter (*fachino*),' writes the Modenese Envoy Ceceopieri, 'have been expelled and put in prison for having, in defiance of the oath of secrecy by which all are bound when setting foot in Conclave, caused it to be distinctly known that Cardinal de Gregorio would be chosen in ten days' time,—an election which, however, went off in smoke, through Cardinal Albani's entrance.'—Bianchi, *Diplomazia Europea in Italia*, vol. ii. p. 430.

being conferred on a Dr. Guattani, who is specially mentioned to have been a practitioner of renown, when Cardinal York expressed his father's hope that the Sacred College, in deference to his royal wish, would not make this nomination—a wish which was accordingly acceded to.\*

The Conclavists constituted and still constitute a corporation conscious of power, and invested with recognised privileges. They have in fact acquired the substantial position which useful subalterns always do acquire. From an early period they appear to have been in the receipt of considerable gratuities which they stoutly exacted, and finally reduced to a legalised tariff. Amongst themselves they fixed a formal code of regulations in reference to perquisites, to which every Conclavist was bound to adhere, although such stipulations were distinctly contrary to Papal Bulls. It was an established abuse that the cell of the newly-elected Pope should be sacked by the Conclavists, each man carrying off what booty he was lucky enough to secure. This monstrous perquisite was once subjected to reform by the Conclavists meeting on the 13th March 1513 in the Sistine Chapel, and discussing the point as if it were the most canonical right. The determination arrived at is preserved in a very business-like *procès-verbal*, given in full by Moroni, just as if it had been a legal document, instead of the expression of triumphant license. It was ruled that in lieu of the Pope's cell being offered up to common plunder, it should be the perquisite of his Conclavist on payment by the latter to his colleagues of 1500 ducats in gold, for which these became bound bodily to each other. But a custom of old date, however illegitimate, is not abolished at a blow; and the Conclavists continued their tumultuous and extortionate proceedings without alteration, in after Conclaves. In 1555 the Cardinals selected Marcellus II., and of his election we have an amusing narrative by the Conclavist Dionigi Atanagi, a Conclavist of more than ordinary audacity—for he ventured on what was little short of sacrilege, in hiding behind the altar of the Sistine Chapel, when all but Cardinals should have left it, and peeping thence upon the very mysteries of the sacred vote which constitutes a Pope. On this occasion the

Conclavists, who appear to have been, all through, more than usually overbearing, chose eight of their number as 'defenders to secure the observance of their privileges, which are many.' At one time Cardinal Cervini was thought likely to be elected, but this Prelate was not popular, especially with the gentlemen-Conclavists, who, we are told, accordingly contrived to put a stop to his election by secretly causing the report of its probability to circulate through Rome in a degree that acted in the wished-for manner upon the Cardinals' nerves, who then fixed on Marcellus. 'Then,' writes Atanagi, 'we all went out of the chapel and accompanied the Pope to his apartment, which he found sacked by the Conclavists, so that he was forced to go into that of Cardinal Montepulciano; at the same time the gates of the Conclave were burst open, and a crowd rushed in. Had it not been for Master Ascanio della Cornia the whole Conclave was in danger of being gutted.' On another occasion the slyness of the Conclavist Torres all but deprived Pius IV. (1559) of his election. Torres was in attendance on Cardinal Cueva. Clandestinely he canvassed one night the Cardinals, speaking to each man singly as if he did so only to himself. His language was that it would be gratifying as well as proper that Cueva, who, he said, could not be elected, should have the honour of the testimony of respect involved in the vote of the particular Cardinal whom he was addressing. The vote, he averred, would be a barren but yet a pleasing distinction. By such representations, cunningly addressed singly to each Cardinal, Torres had actually got thirty-two votes out of the thirty-four in Conclave, and was inwardly chuckling over the astonishment which would follow on the opening of the ballot-box, when the trick is said to have been defeated by Cardinal Capo di Ferro accidentally asking his neighbour for whom he was about to vote, and being told for Cueva, to pay him a compliment at Torres' suggestion. Still seventeen votes had already been given in his favour before the exposure of the trick. Down to the time of Alexander VII. (1655), the sacking of the newly-elected Pope's cell seems to have been the rule. It appears that its contents are now the perquisites of his Cameriere, an individual who stands in the position of familiar menial. The Conclavists are at present in the enjoyment of perquisites secured by Papal rescripts,—conclusive evidence of the peculiar influence possessed by this body of men. Fifteen thousand scudi\*

\* What may have been the particular ground of complaint against Guattani we have not been able to learn. The Chevalier de St. George enjoyed in Rome all the privileges conceded to a sovereign, and as such recommended Cardinals for nomination; it was to him that Cardinal Tencin owed the red hat, according to the President de Brosses.

\* About £3000.

are allotted as a fee after election, to be divided amongst the Conclavists, who besides are allowed the privilege of becoming full citizens in any town within the Pope's dominions, are admitted to the rank of nobility, and, if members of a religious order (every Cardinal must have one *ecclesiastical* Conclavist), are empowered to bequeath, by will, away from their brotherhood.

It has been of late a not unfrequent topic of whispered talk in Rome, how far these prescribed nine days of preliminary ceremonial are obligatory, and might not be dispensed with by a timely fiat of the Pope. The idea is in fact entertained by persons deserving consideration, that in view of the extraordinary difficulties to which the Holy See is exposed, a Chirograph of the Pope is in actual existence, absolving the Cardinals from the obligation of observing the customary form of election, and empowering them to proceed to the nomination of a *Pope coram cadaver*. The report has an air of unlikeliness, but yet it is heard in serious whisper from lips not favourable to hasty gossip, and which persist in calmly affirming the existence of the document with the accent of conviction. There can be no question as to the strict competency in principle of the Pope to authorise such a grave departure from the custom of ages, by an individual act, without the formal concurrence of the Cardinals. There are precedents for similar proceedings. Adrian v. (1276), who reigned only a few days over a month, actually abrogated the great Bull of his predecessor Gregory x., and this repeal remained in force through six elections, until the scandalous consequences of the abolition of disciplinary provisions induced Celestine v. (1294), with his hermit nature, to revive the law of Gregory x. Still more in point would be what was done by Gregory xi. (1370). It was the time when the Holy See, for nearly three-quarters of a century, had been pining in self-willed exile at Avignon. It was felt by all devout minds that the situation into which the Church had got herself, through this step, was ruinous to her interests. The Pope himself, although a Frenchman, was fully alive to the fact that to save the Church it was indispensable to satisfy the outraged conscience of Christendom, by carrying back the Holy See to Rome. But to do this effectively it required an effort of force, for the Pope in those days was in the same plight as many of his successors, of being surrounded by a cabal of hostile interests,—a network of opposing Court influences, in our times called a *Camarilla*. The Pope might himself flit, indeed, to Rome, and yet, with the individu-

als composing the Sacred College—in great proportion creatures of the French Crown, and the existing distribution of political interests, the same might be expected again to occur which already had occurred, that the transfer would be only for so long as the Pope lived. To secure a lasting re-establishment of the See in Rome, Gregory xi. perceived it to be necessary to make, for once, a radical change in the value attached to specified forms in the machinery of Papal elections. By a Bull bearing date 19th March 1378, Gregory xi. at one stroke of the pen suspended every existing regulation on the subject of Papal elections, set the Cardinals free from the observance of any obligations they might have sworn to in accordance to prescription, and specially empowered them not merely to meet for election on his decease, whenever it might seem convenient, but to nominate by *simple majority*. This memorable exercise of Papal authority, constituting a true *coup d'état*, stands justified by the approving voice of all ecclesiastical authorities, who have accepted it, without, so far as we know, one observation conveying an insinuation of usurpation against this Pope for what he did on this occasion. He dealt with a special emergency, as the Council of Constance did, by the application of measures drawn from the inspiration of the moment, and fashioned without slavish deference for precedent; and in both cases the result proved the wisdom of such bold action. Indeed, if we believe a writer whose authority it is difficult to reject, the Papal records would furnish a yet more recent, and, in some respects, a yet more pointed precedent for the issue of an enactment such as Pius ix. is supposed by some to have secretly made. When Pius vi. (1775–1799) was himself a state prisoner in the Certosa of Florence, he is said to have deposited with Monsignor Odescalchi, then Nuncio in that city, a Bull dispensing the Cardinals from the obligation of meeting for Conclave in Rome, and suspending all existing prescriptions of form and ritual, for the express purpose of facilitating an accelerated election, at a season so pregnant with peril to the Church.\* On the demise of Pius vi., a Cameriere of Monsignor Caracciolo—Maestro di Camera—is affirmed to have been despatched to the Cardinals in Venice and Naples to make them

\* This story is given by Moroni in his voluminous *Ecclesiastical Encyclopædia*. This work, composed in Rome, with every possible assistance from the highest authorities, must be regarded as embodying the official views of the Court of Rome on all the subjects treated in its pages, and therefore is a composition of capital importance.



acquainted with this document. In Gonsalvi's recently published *Memoirs* there occurs no confirmatory notice of such a rescript; but from their fragmentary nature this fact would not suffice by itself to disprove a statement made with so much circumstantial detail by a writer in so favoured a position as Moroni for intimate knowledge of Vatican secrets. Our own efforts have indeed failed to glean any additional evidence for this curious story, which would be of evil omen for the purpose which alone could prompt Pius ix. to the step he has been credited with, since, in spite of the special privileges thus supposed to have been extended to it, the Conclave which met in Venice was neither short nor harmonious.

Pius vii. expired in the Quirinal (1823), and, in accordance with the letter of the law prescribing a Conclave to be held in the very palace in which the Pope dies, the Cardinals congregated there. Since then, however, they have continued to do so on each vacancy, without any warranty of the kind. The Vatican is now therefore deserted for those Conclave doings with which its name stands so closely associated. Not that Papal elections were uniformly held there. The churches of Rome abound in historical memories connected with the scenes of Conclaves. Several memorable Popes were created in the Church of Minerva; and even St. Sabina, that stands in solemn loneliness upon the unpeopled heights of the desolate Aventine, once was the scene of eager contests after the death of Honorius iv. of the Savelli blood (1288), in the adjoining family palace, the picturesque remains of which are still so strikingly conspicuous. The earliest Conclave recorded to have met within the Vatican precincts is that of 1303; and not till the election of Urban vi. (1378), did a second assemble at the same spot. Then there followed again a series in various localities, until, in 1455, a succession of Vatican Conclaves began with Calixtus iii. that was not broken until this transfer to the Quirinal in 1823.

Although apparently the Vatican has now become obsolete for electoral uses, its name stands so closely associated with the eventful traditions of Conclaves, that the reader will excuse a few words on the arrangements which on such occasions were made in this celebrated locality. The whole of the first floor of the pontifical palace was strictly shut off for the accommodation of the Cardinals and of the throng of individuals of various degrees who were appointed to share their imprisonment. The Cardinals were lodged each in a booth by himself, technically termed a cell, erected in the vast halls

constituting the Vatican apartments, each of which contained a number of these wooden huts that were divided into a couple of small ground-floor rooms, occupied by the Cardinal, and similar accommodation above for his confidential attendants, the Cardinals created by the late Pope having their cells hung with violet cloth, in sign of mourning, while those of the others were draped in green; and this distinction is still observed. When the Sacred College was so numerous as to cause a pressure for accommodation, the gallery over the vestibule of St. Peter's used to be also given to the Cardinals, as was the case in the Conclave of 1740, witnessed by the President de Brosses.

The distribution of these diminutive houses was always by lot. The one who had fared best in the raffle on the above occasion was Cardinal Tencin, who had drawn the hut in the middle of the gallery, so that the niche of its big central window, walled up until a new Pope has to be proclaimed therefrom, formed a spacious extra apartment at the back of his booth. 'But,' adds the President, 'for this convenience he will also be prettily rifled and pulled to pieces when the new Pope comes to the balcony to give his blessing to the people in the square below.' The great hall at the top of the Scala Reggia, which serves as a vestibule to the Sistine and Pauline chapels, remained always free, and was the playground of the imprisoned Cardinals,—the spot in which they met and walked up and down together for recreation or consultation. Also, the same hall has been the scene of many stirring encounters and sly colloquies. In the Pauline Chapel it was usual to erect six supplementary altars, whereat each Cardinal and Conclavist performed his appointed daily mass, while the Sistine was always set apart for voting operations. It was the polling-booth of the Conclave, and popular tradition ascribes the injured condition of the paintings on its walls and ceiling in great degree to the effect of the smoke from the balloting-papers regularly set on fire in the chapel after every unsuccessful ballot. No plea could enable a Cardinal, or any one belonging to the establishment in Conclave, to extend his steps beyond the precincts of the first floor, every window and aperture in which—especially the arches of the Loggia, running round the court of Saint Damasus—were jealously walled up, with only so much window left as must needs be preserved to let in an indispensable amount of light,—the spared panes being, however, protected against an illegitimate gaze by a covering of oilecloth. The doors at the top of the Scala Reggia, leading into the great hall between

the two chapels, alone were left unvalled, for the admittance of Cardinals who might arrive after the commencement of business, or the ceremonial visits conceded as a privilege to royal persons who might happen to pass through Rome during a Conclave. But these doors, except on such occasions, were kept carefully closed with four locks, two on the outside, the keys of which were entrusted to the Marshal, as porter of this gate; two on the inner side, the key of one being in charge of the Camerlengo, and of the other in charge of the Master of Ceremonies. By the side of the door there were two wheels, or rather turning-boxes, for the admission of objects declared free from suspicion, after inspection by the officers on guard against the introduction of correspondence, and in other parts of the building there were six other such, similarly guarded, for the admission of the many articles without which it was physically impossible for so large a congregation of human beings to get on. The shape of these wooden turning-wheels is the same as those used in the 'parlatories' of nunneries, and their application is ascribed to the ingenuity of Paris de Grassis, who officiated as Master of the Ceremonies at the Conclave which elected Julius II. (1503),—up to which time everything admitted had to be let through an aperture in the wall, as prescribed in the bull of Gregory X. Outside the palace there were posts of soldiers around its walls, and at every approach, and no one was permitted to pass the barriers erected on the Bridge of St. Angelo and at the gate of the Leonine city who was not furnished with a pass-medal, so that the quarter of the Borgo was practically shut off from circulation during the sitting of a Conclave.

In the locality that is now used there is no longer any need for the erection of wooden booths. The portion of the Quirinal Palace devoted to the accommodation of a Conclave is that which runs along from Monte Cavallo to Quattro Fontane. Here there is probably the longest corridor in the world, upon which opens at equal intervals a succession of doors—exactly like those of monks' cells in a convent corridor—that lead into apartments comprising each three or four rooms. Here are the habitations of the Cardinals during Conclave, who draw lots for them exactly as they did for the booths. On all points of form and ceremonial, however obsolete for practical purposes, there is observed a minute imitation of what was the rule in the Vatican. As formerly the Borgo, so now the street running towards Porta Pia, is closed by chains, while at the top of the great staircase are met the

same turning-boxes that figured at the head of the Scala Reggia. Some avowed relaxation indeed appears to have become sanctioned from the absolute seclusion to which the Cardinals are condemned by the tenor of Papal Bulls, which are, however, unrevoked. At these wheels Cardinals are allowed occasionally to converse with visitors,\*—but always so as to be overheard by attendant guardians,—as also to receive letters under the restriction of their being first perused by these. It is superfluous to add that in spite of the severe penalties launched with the full weight of Pontifical anathema against every violation by an inmate of the Conclave of the command not to hold intercourse with the world, the correspondence between the Cardinals within and their political friends without has at all times been general. As a rule, the secret of sitting Conclaves has not been denser to penetrate for those having an interest to do so than the secret of pending conferences generally are for the parties engaged in working and counter-working political plots. In Father Theiner's elaborate History of Clement XIV., for the vindication of his election against the charge of uncanonical engagements beforehand to sacrifice the Jesuits, we have been furnished with the confidential correspondence kept up day by day by immured Cardinals with their confederates outside. Also it is amusing to read the involved explanations through which the perplexed author tries to extenuate this flagrant violation of the plain letter of Papal Bulls. There is no publication which sheds so full a light upon the whole process of Conclave proceedings as these pages in Father Theiner's book.

When all preliminary observances are over, the Cardinals assemble in the church of St. Sylvester, on the Quirinal, opposite the Rospigliosi Palace, known to visitors of Rome for the paintings it contains by Domenichino, but possessed of a yet higher interest as having been the scene where Vittoria Colonna, who resided in the adjoining convent, used on Sundays to hold deep colloquies with Michael Angelo and other choice spirits, of which a striking record has been strangely preserved in the diary of a Flemish painter, which some years ago was discovered in the Lisbon Library.† In this

\* No one is permitted access to these wheels—termed *le rote nobile*—unless provided with a small staff painted green or violet, and bearing some Cardinal's arms, or with a pass-medal from the Camerlengo, or Maggiordomo, or Governatore, or Marshal, or General Auditor of the Ap. Chamber.

† It has been printed in part in *Les Arts en Portugal*. Par le Comte A. Raczyński, 1846.

church they attend a mass of the Holy Ghost, and listen to a sermon, after which, preceded by their attendants, and the full string of office-bearers, the Cardinals walk in procession across the Piazza, and solemnly enter Conclave, which, however, is not finally closed until a late hour in the evening. Till that moment the Conclave presents a scene of busy activity; for it is customary for every person of rank in Rome to pay his respects to each Cardinal in his cell. The Conclave therefore offers the gay appearance of a public State reception such as every ambassador holds in Rome on his arrival, and every Cardinal on his nomination, with this difference, that only the male sex is present at the Quirinal. But there is more done on this afternoon than merely to whisper words of compliment. The swarming hive of busy beings hurrying from cell to cell is alive with political emotions. Hither hie, then, all the ambassadors, and envoys, and political agents in Rome, to snatch the last opportunity afforded for unrestricted conference, to give the last stroke to eager appeals of soft persuasion or deterring menace, the last touch to cunning combination, and particularly to deposit in the hands of an intimate confederate the knowledge of those whose nomination their Courts will absolutely not brook. At the third ringing of a bell, three hours after sunset, the Master of the Ceremonies makes his appearance, and calling aloud '*Extra omnes,*' obliges strangers to withdraw beyond the sacred precincts, to which every ingress is then jealously walled up, except the door at the head of the principal staircase, on which bars and bolts are drawn, and heavy locks are turned, with due formality—those on the outside in presence of the Prince Marshal—those within, of the Camerlengo and his three Cardinal colleagues; and now is proclaimed the commencement of that solemn confinement, which by law should be absolute until a new Pope has been created, or at all events, according to the constitution of Gregory x., until a vote of two-thirds of the immured Cardinals shall have ruled its suspension. Often, however, this preliminary work of clearance has proved a task of trouble, and poor Masters of the Ceremonies have been driven distracted by the obduracy of ambassadors in giving no heed to their repeated summonses, and earnest supplications that the final conferences with confidential Cardinals should be concluded.

Before proceeding to actual business, the Cardinals go through the formality of proving their right to attend Conclave. In reality, this is nothing more than a form glibly run through, for there can be no danger of

personation in this small constituency. But this ceremony affords the opportunity of saying a few words on a point about which, more than any other connected with Roman ceremonial, there prevails misapprehension—the real nature and position of a Cardinal. That laymen can be made Cardinals is generally known; but we venture to say that whoever has tried to elicit an explanation in Rome of the particular distinction between such lay Cardinals and their colleagues in holy orders—the difference is standing between the two—will have been perplexed with the confused answers he will probably have received to his inquiries. The only means of obtaining the requisite information is by a perusal of Papal edicts. The Sacred College is now fixed at seventy members—six Cardinal Bishops, fifty Cardinal Priests, and fourteen Cardinal Deacons,—according to a rule that has been in force since 1585.\* Now, there is no canonical injunction which imposes any qualification for a Cardinal that can limit a Pope's selection, except, it would appear, the condition of celibacy. Provided a man has not a wife alive, he is quite able to be promoted to this rank in the Church any moment it may suit a Pope to confer it. It is a more perplexing point to ascertain how far, as Cardinal, the layman is subject to ecclesiastical obligations, and can return to the world with only the sanction of the Pope. A long list of Cardinals who have done this can be made out, but in almost every instance the change in condition happened by special dispensation from the Pope. The only instances in which, to our knowledge, Cardinals returned to the former state without the Pope's declared assent, are against their having the privilege of taking by themselves such a step; for they are instances of Cardinals, like Chatillon, in rebellion against the Church. On the other hand, the instances on record of Cardinals who were relieved from their ecclesiastical obligations are extremely curious, and testify strikingly to the

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\* It adds much to the confusion on this subject, that this division into classes is often only nominal, a Cardinal being put by favour or for other reasons into an order he does not belong to. The present Dean of the College, Cardinal Mattei, for a long time figured as a Cardinal Deacon, although he had taken priest's orders. More perplexing is it to find Cardinal Priests who have never taken these orders. Such was the case with Cardinal Dandini, who, when merely a deacon, was made in 1823 a Cardinal Priest and Bishop of Osimo. 'Only nine years later,' says Moroni, 'did he take priest's orders, having in the interval taken part in three Conclaves as a Cardinal Priest, without really having that character.' Nor is this all. Moroni speaks of persons having ranked amongst six Cardinal Bishops when they had never been more than deacons.

wonderful elasticity in the regulations of the Church. These dispensations constitute a highly instructive, but also a little-read chapter in the history of the Romish organization. Cardinals even in orders have repeatedly been permitted to divest themselves of their dignity and to marry; but in every such case well-defined political influences appear to have been the predominating cause that induced the Pope to concede the favour. Thus in 1588 we find Ferdinand Medici authorized to throw off the purple, and become Grand Duke of Tuscany; in 1642 Cardinal Maurice of Savoy to take a wife and a duchy; in 1695 Cardinal Rainaldo of Este to make the same change in his condition. On the death of King Ladislas of Poland, his brother Casimir, a member of the Society of Jesus, and named Cardinal in 1646, received a dispensation not merely to abandon the purple, but also to marry the King's widow, his sister-in-law, Mary Gonzaga. Still more astonishing were the favours conceded to two brothers of this lady's house. To prevent extinction of the family, Paul v., in 1615, permitted Cardinal Ferdinand Gonzaga to go back into the world. On this change he became enamoured of a woman of inferior rank, Camille Erdizzani, and married her; but becoming afterwards tired of his wife, he sought and procured the Pope's authority for repudiating her, when he espoused Catherino Medicis, daughter of Duke Cosimo II. But there was at the time a second Cardinal Gonzaga—Vincenzo, the brother of Ferdinand,—and he also succeeded in obtaining permission to give up the Church for the sake of indulging his passion for a kinswoman, Isabella Gonzaga.\* In all these cases, it is clear that some orders had been taken; and therefore, in the strict sense of the term, these Cardinals were no

longer laymen. The real state of the case is that the rank of Cardinal is an ecclesiastical dignity, but that practically it has been conferred on laymen by the intervention of a fiction like that invented to make Protestants capable of receiving the cross of St. Louis in France, which was given only for ninety-nine years to heretics, who forfeited it, if still unconverted at the end of that period. So also laymen were named Cardinals only for twelve months, being bound within that period to take deacon's orders; but then the same plenary power which had elevated them could extend its favours to an indefinite renewal of the expired dispensation at the end of each year. By the Bull of Pius IV. it was, however, distinctly ruled that no Cardinal still a layman could exercise the privileges of his dignity in Conclave. To be entitled to vote in the election of a Pope he must have taken deacon's orders, and this rule has been observed in practice until in Rome it is the general off-hand statement that this is so fixed by canon law. But here we find, on going to the fundamental authorities, that, as is so often the case in all matters connected with the subject of Conclaves, the current version is not accurate. In Gregory xv.'s (1621–23) elaborate Bull and Ritual, which are at the present moment the ruling statutes for Papal elections, it is distinctly laid down that this exclusion is only against such lay Cardinals as may not be furnished with a specific Papal dispensation. The power of especial favour here recognised has not been exercised generally, and it may be practically correct to say that lay Cardinals have had, as a rule, to take orders before being admitted to a Conclave. In this century, this was certainly the case with Cardinal Albani, who became a deacon only when in 1823 the Pope's death offered the opportunity of giving a vote.\* One instance of a lay Cardinal ad-

\* Perhaps the most remarkable dispensation on record is one granted by Alexander III. for the express purpose of preventing the extinction of the Giustiniani family, then reduced to one male member, Nicola Giustiniani, a Benedictine monk who has since been beatified. In virtue thereof Nicola left his convent, married the daughter of the Venetian Doge Micheli, and when he had begotten a sufficient number of sons to secure the continuation of the line, went back to his religious profession. Amongst the curiosities of Papal history that are little known, is the fact that the chair of St. Peter has been occupied successively by father and son—Pope Silverius, 536, who was followed by his son Hormisdas. In this instance the Pope had become a widower before election. But in the third portion of the *Annales Bertinianorum*, written by the celebrated Archbishop Hincmar, and to be found in Pertz, *Mon. Germanica*, vol. i., there is given an account of the abduction of a daughter and the wife *Stephania of Pope Hadrian* in 868—that is to say, a period to which the Archbishop was a contemporary witness. The story is narrated with much detail, and with the name of all the parties implicated.

\* Cardinal Albani's proceedings are recounted in the following way by Crose, Sardinian Envoy to Rome, in a confidential dispatch: 'Another historical observation is supplied by Cardinal Albani, who at the period of Conclave was not yet ordained. Until then he had always expressed his intention to abandon the purple and to marry, with the view of not letting his most noble family become extinct. While in this state of hesitation, he had always obtained from the Pope a prolongation of the terms within which he had to come to a decision; but it happened that this term would have expired just during Conclave, so that he would have been obliged to go out of it, inasmuch as, during the vacancy of the See, there existed no authority which could renew the requisite authorization. From a sense of this, Cardinal Albani made up his mind to become Sub-deacon on entering Conclave, and thus he was qualified to exercise his influence in behalf of the Imperial Court.'—Bianchi, *Diplomazia Europea in Italia*, vol. ii. p. 389.

mitted to Conclave did, however, certainly occur when Sixtus v. was elected (1855.) The Cardinal Archduke Albert (who eventually married) arrived in hot haste from Innsbruck, and having exhibited his license from the late Pope, was permitted to co-operate with his fellow Cardinals in giving a new chief to Catholic Christendom, although, as is explicitly stated, he never had taken any orders. At the present moment there are no lay members of the Sacred College; but this is so only since, quite recently, the reigning Pope expressed his desire that those amongst the Cardinals who had not taken deacon's orders should do so. Amongst the number was Cardinal Antonelli.

A freshly-named Cardinal is subjected to a form of novitiate, during which he is technically said to be *cum ore clauso*, being invested with the symbols of his rank, but precluded from uttering an opinion on or taking an active part in any matters falling within a Cardinal's sphere, until he shall have been relieved from apprenticeship by the Pope *solemnly unsealing his mouth*. Of late this phase of preparatory state has in practice been reduced to a mere form—the *closing* injunction and the *opening* confirmation in full rights being performed in one consistory. Still, this is as yet an innovation, without written authority, and a return to stricter observance of primitive custom is at any time quite possible. At the time when this novitiate was a reality, it was a matter of importance to decide how far this limitation of powers in a Cardinal actually created could extend even to the suspension of the franchise belonging to his rank in the event of the Pope's demise before his mouth had been solemnly unsealed. Eugenius iv. (1431–47), by a Constitution prohibited Cardinals in this state from taking part in elections; but that prohibition was repealed by Pius iv., and the question must be considered absolutely set at rest by the confirmatory ruling of Gregory xv., that every *promulgated* Cardinal (in distinction to those *in petto*) has an inalienable right to participate in Conclaves, which ruling has been still further confirmed by the circumstances which marked the Conclave convened on the death of Clement ix. in 1670. At that moment there were seven Cardinals *cum oribus clausis*. All went into Conclave, and one of their number, Altieri, came out of it as Pope.

A Cardinal's right to record his vote at Papal elections is regarded as so sacred that it has been guarded by perfectly exceptional provisions, such as seem to constitute in canon law the single limitation set on the Pope's plenary authority. It has been distinctly

ruled that no censure, suspension, interdict, nor even *excommunication*, can involve forfeiture by a Cardinal of his right to exercise this specific privilege of his order. There is no more startling provision in the whole Roman organization; indeed it is so startling that many Catholics will be disposed at the first blush to doubt its authenticity. Yet does this enactment stand not merely as an obsolete curiosity on some forgotten page in the statute-book; Roman Curialists hold it to be still in full force, and when the last case in point occurred, in 1740, with Cardinal Coscia, it was invoked, and strictly acted upon without discussion. The principle dictating this provision is to be found in the feeling (very natural in times of bitter feuds) that, unless this particular privilege of Cardinal were set beyond the reach of confiscation, a Pope of strong partisan views would have only to impose from his plenary authority ecclesiastical penalties to disable Cardinals of a faction opposed to his own from having any weight in the choice of his successors. Nor were such apprehensions without their warrant in facts. Like all the organic laws concerning the mode of Papal elections, this provision was due to no abstract theory, but was simply the result of a want that had been practically encountered. On the 10th May 1297, Boniface viii., blinded by furious passion against the house of Colonna, excommunicated and *degraded* from their rank the Cardinals James and Peter Colonna, declaring them stripped of every privilege appertaining to their dignity. The extraordinary severity of a sentence, manifestly dictated by the bitter hatred of family feuds, because not justified at the moment of promulgation by adequate canonical delinquencies on the part of these Prelates, produced a profound sensation. It was evidently a point of principle with Boniface viii. to wield his power for extermination of the Colonna influence, if not for actual extinction of the race. Solemnly degraded from their rank, these Cardinals, on the death of Boniface, found themselves excluded from the Conclave, and vainly sought from his successor restitution to rights which they declared to have been taken away in defiance of justice. The consequence was a protracted state of angry feelings, rendered formidable by the material power of the malcontent Colonnas, and accompanied by muttered protests against the canonical legality of a situation in which dignitaries of the Church were arbitrarily excluded from their inherent prerogatives. A sense of the danger to be apprehended from the recurrence of arbitrary acts of the same nature was awakened. It was felt that

a Pope of headstrong passions like Boniface VIII. must absolutely be precluded from exposing the Church again to grave peril for the sake of purely personal hatred and ambition. Accordingly, just thirteen years after the memorable degradation of the Colonna Cardinals, a Bull in reference to Papal elections was issued by Clement v., in which the following most remarkable clause was inserted:—'But in order that, as concerns the before-mentioned elections, dissensions and schisms be so much the more avoided, as the occasion for dissent is removed from those elections, we decree that no Cardinal may be expelled from the said elections on the ground of any excommunication, suspension, or interdict whatsoever.' The provision thus made has been subsequently confirmed by Pius IV. and Gregory XV. in so full a manner as to remove all ambiguity on this head, for not only have those under sentence been declared relieved at election times from the disabilities involved thereby, but, what was quite as necessary, their colleagues were dispensed, during the interval, as regarded them alone, from the obligation to hold no intercourse with an excommunicated and censured individual. There are instances of Cardinals who since this enactment have undergone extreme penalties, even decapitation, but we know of no instance in which this particular provision in regard to the indelible right of franchise has been set at naught. In the time of Leo X. several Cardinals were convicted of a conspiracy against his life. Of these, one, Cardinal Petrucci, was strangled in the Castle of St. Angelo on the 6th June 1517, while Cardinals Saoli and Soderini were indeed degraded, and declared stripped of both *active* and *passive* voice in a Conclave—that is, of the power of either *voting* or *being elected*; but this sentence was cancelled before the Pope's demise tested its validity. Under Leo's successor Cardinal Soderini again stood convicted of conspiracy, and was imprisoned in the Castle of St. Angelo; but on the last day of the Pope's obsequies he was let out by the Sacred College, and gave his vote in Conclave for Clement VII., by whom he was then restored to all the honours of his rank. But the ruling case on this point is that of the notorious Cardinal Coscia, who under Benedict XIII. (1724–30) wielded the whole power, and dispensed the whole patronage of the State. On this Pope's death, his favourite was so universally an object of detestation, from his iniquitously corrupt proceedings, that he fled from fear of popular vengeance to Cisterna, then as now the family seat of the Duke of Sermoneta, who, in a letter to Cardinal Bar-

berini, preserved in the Gaetani archives, describes him to have arrived more dead than alive from fright. Under the protection of a safe-conduct from the Sacred College, Cossia stole back into Conclave. The new Pope, Clement XII. (Corsini), was unable to withstand the clamour of denunciation which from all sides was raised against the member of the Sacred College. Cardinal Coscia was brought to trial for fraud, malversation, and peculation of the most scandalous kind; the charges were fully established, and he was sentenced to a fine of 200,000 crowns, to ten years' close confinement in St. Angelo, deprivation of his see of Beavento, and to absolute degradation from the rank and privileges of the Cardinalate. Before long the Pope felt misgivings about the sentence so pronounced, and wrote a Chirograph bearing date 11th December, 1734, to regulate and modify the conditions of Coscia's penalties. This Chirograph we have found in a volume\* of manuscript documents in the Corsini Library, relating to the Conclave held on the Pope's death, which is manifestly composed of papers that belonged to the Cardinal-Nephew of Clement XII. There does not exist a more remarkable Papal utterance than this document, wherein the Pope explains fully the afterthought that induced him to revoke his first sentence as objectionable, if not actually faulty in principle, in spite of his having pronounced it, as he admits, with the deliberate intention of cancelling the binding force of previous Papal edicts of limitation. That a person laboring under such grave convictions as Coscia should have part in creating a Pope was contrary to propriety; therefore, said Clement XII., it has been originally pronounced that every election in which he intervened should be *ipso jure* null and void, 'every power and faculty being taken away of calling the said Cardinal Coscia to give his vote in such election on the ground of any claim or motive specified in canon law, or in virtue of any constitution whatsoever of Pius IV., Gregory XV., and other our predecessors.' A more carefully worded expression of Pontifical plenitude so as effectively to override every apparently opposing enactment cannot be conceived. Yet Pope Clement goes on to state that having reflected on the grave consequences that might follow on such annulations and invalidations, he feels himself bound to put forward the declaration that he did not in any way pretend of his authority to impugn the validity of a yet future election. 'Wherefore,' writes the Pope,

\* Vol. 1618 in Catalogue of MSS. in Corsini Library.



'we declare that never has it been our wish or intention to prejudice the canonical election of our successor, or the supreme dignity and authority of the Church which after our demise shall be lawfully vested in the person of him who has been chosen with the accustomed forms, it being according to neither reason nor equity that the transmission to his person of a penalty attaching to the delinquent be assumed capable of occurrence, and that injury should befall the freedom and union of the Apostolical College in its so needful mystic body.' By this Chirograph the Pope accordingly abrogated the sentence stamping with invalidity an election in which Coscia took part, with the proviso, however, that an election, to be canonical, must not gain its obligatory majority of two-thirds by his individual vote, and that during his ten years of strict confinement this Cardinal's electoral privileges should be restricted to voting, and not entitle him to obtain the suffrages of the Sacred College, because it would be unseemly to consider eligible for Head of the Church an individual let out of prison only for as long as a Conclave lasted. This is what happened therefore on the death of Clement XII. In the same volume containing the chirograph, there is the autograph letter of Cardinal Coscia, dated the 6th February 1740, from the Castle of St. Angelo, and written to the Cardinal-Nephew of the late Pope, in which he claims to be set free for admission to Conclave, a request which was at once conceded. The President de Broesses, as he was going home from witnessing the procession of the Cardinals walking met 'Coscia in the shut chariot of Cardinal Acquaviva, who had been to fetch him from prison in the Castle of St. Angelo, and was taking him to his cell.'\*

The precedent furnished by this case has never been reversed, although sentences of degradation have since been launched against Cardinals. In a secret Consistory of the 13th February 1786, Pius VI. suspended and declared stripped of *both active and passive voice in Papal elections*, Cardinal Rohan, for having violated his duties by acknowledging the jurisdiction of the Parliament of Paris, a lay tribunal,† unless within six months he exculpated himself before the Holy See for this dereliction of his obligations. Far more sweeping and absolute was the condemnation

pronounced by the same Pope on the 26th September 1791 against Cardinal Lomenie de Brienne, for having sworn the civil constitution of the clergy that had been voted in France. He was pronounced to be a schismatic, and as such perjured, degraded, and wholly stripped of all his dignities and privileges. But it happened that both these Cardinals died before there had been any opportunity for testing the validity of these sentences to disable them from claiming at election time to be admitted to the exercise of indelible rights. The stormy days in the wake of the French Revolution furnished also some instances of Cardinals smitten with the prevailing passion for repudiating old-fashioned institutions, and indulging in a display of new ideas. During the heyday excitement of a republic that seemed established on the Capitol, two Cardinals, of whom one belonged to a great and princely family in Rome, thought it good policy to turn their backs on what looked like a foundering fortune. In March 1798, Cardinal Altieri wrote to the Pope expressing his wish to divest himself of the purple, on the ground of a growing sense of bodily infirmities. But Pius VI., who knew that other motives prompted the unusual application, addressed a letter to the Cardinal, remonstrating against his setting an example of faint-hearted desertion. Before this appeal reached Cardinal Altieri, he had however already taken an irrevocable step, and sent his absolute renunciation of the Cardinalate to the Pope, in imitation of Cardinal Antici, who, on the 7th March had done the same in two letters, one addressed to the Pope, and the other to the *two consuls* of Rome. Yet Pius VI. declined to accept these renunciations, and continued to regard the two renegades as still Cardinals, and canonically not relieved from their obligations, until the consideration of the consequences that might follow from their claiming, in virtue of this refusal on his part, to take part in the Conclave, induced him from his prison at the Certosa, by two briefs of the 7th September 1798, to declare Altieri and Antici, on their own renunciation, stripped of all the privileges and rights appertaining to their former dignity, especially any voice, active or passive, in Papal elections. Altieri died soon after, in 1800, without seeing any turn in Pontifical fortunes which might have made him regret his step as hasty. Not so Antici, who not only witnessed the restoration of Pius VII. to his dominions, and of the Sacred College to its good estate, but when he looked on all this pleasant recovery, tried himself to participate in it. On the death of Pius VII. Antici addressed the Sacred College to be admitted

\* 'Coscia, Minister under Benedict XIII., meriting the gallows—condemned to imprisonment for life in St. Angelo, where, it is said, he thrived wonderfully, because it cost him nothing, and he was hoarding money,' is the character given by the President of the notorious Cardinal.

† In the matter of the Diamond Necklace.

to the Conclave, on the plea that his privileges had been merely superseded. The request was at once rejected, and Moroni says that the letter written in reply to the communication of this decision was signed *Thommas Antici, late Cardinal*. He ended his days in obscurity at Recanati.\*

The question of how far a Cardinal can be stripped of his privileges by the Pope has recently acquired interest in connexion with the proceedings understood to have been instituted against Cardinal Andrea. That prelate left Rome surreptitiously about two years ago, and took up his residence at Naples, on the plea that his health absolutely required a change of residence, for which he had vainly sought the Pope's sanction. By a Bull of Innocent x., a Cardinal absenting himself from Rome without the Pope's permission, is declared liable to forfeit all emoluments from any benefice he may hold. It is confidently asserted that the intention was entertained at Rome to exceed the limits of these penalties. The political opinions to which the Cardinal has freely given expression inspired the Pope with the desire to degrade him completely, so as to prevent his possibly proving the means for the importation of an element of disunion in the next Conclave. For a while it was whispered that the appointed congregations were actually engaged in drawing up the capital sentence against the recusant Cardinal—a sentence which would at the same time elevate the absoluteness of Pius ix. to a point beyond all challenge. Nevertheless, no such sentence has been promulgated, and hitherto the Cardinal has suffered only that loss of income to which he was liable by the terms of Innocent the Tenth's Bull; nor is it believed that the original idea of proceeding to extreme penalties is any longer entertained in the Vatican. It may therefore be considered an established point, surrounded with as many guarantees as can exist against the action of an authority which claims in principle to be above all limitations, that a Pope may send a Cardinal to the scaffold, but that he cannot, by any sentence of excommunication or degradation, deprive him of the power of giving his vote at a Papal election. Everything else can be taken away, but this right, once conferred, would seem to be indelible, except in the one case of a Cardinal having himself discarded the purple, when precedent proves him to be certainly debarred from again resuming it of his own accord at a change of humour.

As the Quirinal Palace contains only one chapel, the Paolina, this has to be arranged

so as to serve the Cardinals both for mass and voting. The balloting accordingly takes place in the presbytery, in front of the altar, the floor of which, covered with a green carpet, is brought on a level with the base of the pontifical throne, which is removed; while on the Gospel side of the altar a chair is put for the new Pope, from which to receive the adoration of the Cardinals immediately after election. Inside the railing of the presbytery are the seats of the Cardinals, each with a canopy of green for those of older date, and of violet for those created by the late Pope. As soon as an election has taken place, these are lowered, the canopy over the new Pope remaining alone aloft. Before each Cardinal is a table with all the materials required for writing and registering his vote, while in the middle six such tables stand apart for those Cardinals who might fear being overlooked if they wrote and folded their ballot-papers at their own stalls. On the Gospel side the Cardinal Dean occupies the first seat, being followed by the others in the order of precedence, so that the senior Deacon sits opposite to him on the Epistle side of the altar, in front of which is a large table, with the chalice serving as a ballot-box, while at the back is the fire-place, wherein, after an inconclusive ballot, the papers are burned, whose smoke, issuing through the chimney, is watched for at a set hour by the crowd on the Piazza as the signal that Rome is without a Sovereign,—the Church still without a Head.

The ingenuity of some ecclesiastical antiquaries has amused itself in fancifully recognising infinite variations in the modes of Papal elections. But even if warranted in fact, these distinctions must be held to be without any living value, for the bull of Gregory xv., which is the capital statute on the subject, explicitly declares that there are only three modes in which a Pope can be lawfully created: by *inspiration*, by *compromise*, and by *ballot*. The first, which requires that, spontaneously, without any kind of previous conference, all the electors of one accord should simultaneously proclaim the same individual, may be dismissed without further comment as an altogether ideal conception,—in spite of ecclesiastical writers giving a list of Popes created by this process. Of much greater practical importance are the conditions regulating the second form, which we have seen was invented by the instinct of the Church, as a means to put an end to the intolerable state

chi insisted on entering the order of the Jesuit monks, and would not be content until the Pope in Consistory had acquiesced in his ascetic propensities.

\* The latest case of a Cardinal divesting himself of the purple occurred in 1838, when Cardinal Odescal-

of affairs which weighed upon it in the interminable Conclave held at Viterbo. The expedient of delegating to a small committee of Cardinals the power which the whole body found itself too much torn by dissension to exercise, has been resorted to on several occasions, and is still considered in Rome as not obsolete. The most memorable instance of its application was furnished when the impossibility for the Cardinals assembled in 1304 to agree on a candidate induced them to intrust the election to a delegation out of their own body, which gave to the Church Pope Clement v. (1305-14), who then transferred to Avignon the Holy See. It is affirmed by the Cavaliere Borgia, in the life he wrote of his uncle, Cardinal Borgia,\* that when the Conclave held at Venice, after the decease of Pius vi. (1799), reached the third month, it was contemplated to invest nine Cardinals, amongst whom was his uncle, with the duty of selecting a Pope, and that the idea was not followed up only because at the nick of time the votes of the College happily concurred in creating Pius vii. It is true that here again Consalvi's Memoirs fail in speaking to the correctness of this assertion; but, as we have before remarked, the absence of such confirmation in this quarter does not seem to us of itself necessarily to invalidate its authenticity. Gregory xv. has closely prescribed the forms to be employed for the mode of election, but they are not of his own invention, being only an adaptation of those already contained in an ancient Ritual by Cardinal Giacomo Gaetani Stefaneschi, to be found in Mabillon's *Museum Italicum*.

The ordinary election by ballot is performed by two processes repeated daily,—one in the forenoon, which is a simple ballot; the other in the afternoon, which consists in the process technically called of *acceding*, whereby an elector, revoking his morning's ballot, transfers his vote to some one whose name had that morning already come out of the ballot-box. Hence the designation of the supplementary ballot, for in it the faculties of electors are strictly limited to the power of adhering to some Cardinal whose name at the early ballot has been drawn. The voting papers are square, and folded down, so as at each end to have a sealed portion, within the upper one of which is written the voter's name, to be opened only under special circumstances; and in the other, sealed with the same seal, some motto from Scripture, which, once adopted, must be the same at all ballots,

and serves ordinarily as the means for identification of the vote. In the middle space, which is left open, stands the name of the candidate. Advancing to the altar, after a short prayer in silence, and an oath aloud, wherein the Saviour is called to witness that the vote about to be given is dictated by conscientious convictions, each Cardinal drops his paper in the chalice upon the altar. When all have voted, the examination of the papers is made by the scrutators, three Cardinals selected by lot, who successively hand to each other every paper, which is by the last filed on a pin. Should a candidate come out with just a majority of two-thirds, it then becomes necessary to open the upper folded portions of the ballot-papers, with the view of ascertaining that this majority is not due to the candidate's own vote; it being not lawful for a Pope to be the actual instrument of his own creation. In the case of no adequate majority, these papers are preserved, so as to be able to check, through the mottoes, the votes given in the supplementary ballot, it being, of course, unlawful for a Cardinal to repeat a second vote in behalf of the candidate for whom he had already voted in the morning. The form of tendering this second vote is by writing '*Accedo domino Cardinali*,' while those who persist in their morning's choice insert the word '*Nemini*.' Should both ballots fail in producing the legal majority, then the papers are burnt, while in all cases the portion containing the voter's name is to be opened by the scrutators only in the event of some suspicion of fraud or of a vote being invalid, through some violation by the elector of the prescribed forms. In the Conclave of 1829 Cardinal Castiglione came out of the ballot with thirty-five votes, against twenty for Cardinal Gregorio, and twelve for Capellari, afterwards Gregory xvi. On examining the papers, the scrutators, however, found two votes dropped into the afternoon ballot with mottoes that did not tally with any amongst the morning's votes. Two Cardinals are named as suspected of having committed this act, probably with the vain hope of defeating Castiglione's election. All it effected was to vitiate the ballot of the day, and on the following morning Castiglione became Pius viii. by an increased majority. The election of Urban viii. (1623) was put off for a day by a yet more unworthy trick. When the papers were being looked through one was found wanting, and, although the canonical majority had been secured, the election was nevertheless void—as every Cardinal in Conclave must lodge his vote. Suspicion fell on one of the scrutators, who is believed

\* *Notizie Biografiche del Card. St. Borgia del ch. Constantino Borgia*, 1843.

to have abstracted the paper from the chalice, and dropped it into his sleeve, solely to prevent an otherwise inevitable result from being arrived at that morning.

The narratives of Conclaves are filled with accounts of election manœuvres practised by plotting Cardinals with the view of bringing about, by underhand tactics, some preconceived result. The whole system of these proceedings bears the visible impress of that cautious and cunning temperament which never operates but under a mask, and never contemplates to work otherwise than by stratagem. Of these tricks the most common—indeed so common as to be an established feature in Papal elections—is the naming of sham candidates by the rival sections. The general object of this device is to elicit the exercise of the veto vested in certain Catholic sovereigns, and which can be given but once. If it be intended to carry a Cardinal known to be obnoxious to a sovereign possessed of this privilege, then some other Cardinal, also known to be distasteful to him, is started, and pushed to the very verge of the required majority, in the hope of causing the veto to be pronounced, when no obstacle from that quarter can any longer stand in the way of the concealed candidate, who had all along been the real object of predilection. The origin of this privilege of excluding from the Papacy is involved in mystery, but its existence is formally recognised by the Court of Rome, although there has been much dispute about the claims which the Crowns of Portugal and Naples always put forward to its possession.\* As regards France, Austria, and Spain, the privilege is, however, absolute; and its exercise is surrounded with all the accurate formality of a publicly admitted right. On the occurrence of a Conclave, the secret determination to protest against particular Cardinals is confided by each Court to some member of the Sacred College, who is trusted with the duty of making this known at the proper moment; or, in the event of a Court having no Cardinal on whose fidelity it can rely, then this knowledge is deposited with the Cardinal Dean. For a protest to have effect it must, however, be lodged before a canonical majority has been actually obtained; for a Pope, once created according to the prescribed forms, cannot be unmade by the intervention of any power. So it is said that in 1823 Leo XII. owed his election to a surprise—the French Cardinals, Clermont and De la Fare, who were instructed to exclude him, having been

outwitted by the stealthy suddenness of the final ballot. The latest instance of exclusion was in 1831, when Cardinal Giustiniani was excluded by Spain, at which Court he had been Nuncio. Moroni gives a detailed account of the proceedings observed on this occasion. The Cardinal was visibly on the verge of election; on the day's ballot he counted twenty-one votes, and it wanted only twenty-nine to secure his triumph, when Cardinal Marco-y-catalan informed Cardinal Odescalchi, nephew to Giustiniani, and the Cardinal Dean Pacea, that he was charged to exclude him by order of the King of Spain. The communication was not expected, and doubt was expressed as to the reality of this expressed intention. Thereupon Cardinal Marco produced a letter from the Spanish Ambassador, Gomez Labrador, dated 24th December 1830, instructing him, 'at the express order of his Catholic Majesty, to exclude his Eminence Cardinal Giustiniani from the pontifical throne.' This despatch the Cardinal Dean then read out to his assembled colleagues before proceeding to the morning ballot on the 9th January; after which Cardinal Giustiniani addressed them, expressing ignorance of what he could have done to make the King of Spain take this step, but professing to thank him for the greatest favour he could have bestowed by keeping him from the Papal throne.\* '*Semel exclusus semper exclusus*' is a saying not absolutely true; for Clement VIII. had been excluded in three Conclaves by Spain, and Innocent X. was elected with a French exclusion suspended over him. As for the category of Cardinals who have the best chances of gaining the suffrages of their colleagues, there is a Roman proverb which says that three are the streets leading

\* At the Conclave of 1824 Austria excluded Cardinal Severoli through the agency of Cardinal Albani. A despatch of the Sardinian representative in Rome, published in the valuable appendix to the second volume of Bianchi's *Storia della Diplomazia Europea in Italia, dell' anno 1814 all' anno 1861*, gives very curious details of the incidents that marked this proceeding. The veto was so unpopular, that it was sought to be set aside on the plea of Cardinal Albani's not having been duly invested with the formal authority to exercise this privilege on its behalf by the Court of Vienna; so that Severoli continued to poll votes after the protest had been lodged, until Count Apponyi, then Austrian ambassador, handed in a note, the text whereof is given by the Sardinian diplomatist, confirming Albani's authority. The Cardinal's exclusion was conveyed in the following terms. 'In my capacity of Extraordinary Ambassador to the Sacred College met in Conclave, . . . I fulfil the displeasing duty of declaring that the Imperial Court of Vienna is unable to accept His Eminence Severoli as Supreme Pontiff, and gives him a formal exclusion (*gli dà una formale esclusione*).'

\* The claims of the latter would naturally descend to Italy.

straight to the Vatican, those of the Coronari (rosary-makers), Argentieri (silversmiths), and Lungara (long street): \* which is taken to mean that much outward show of devotion, expenditure of money, and an industrious swarming up the ladder of ecclesiastical routine, are the three safest means of reaching the Pope's throne.

In canon law there are no limitations restricting the selection of Pope within the body of Cardinals. It is true that since Urban vi., in 1378, no one below this rank has mounted the chair of St. Peter, but still it is worthy of note that this now established practice exists in virtue of no higher sanction than custom, and that there is nothing in canon law to render invalid even the choice of a layman for the Papacy.† John xix. (1024) and Adrian v. (1276) were certainly laymen, and the latter furnishes the conclusive precedent establishing that a Pope acquires all the plenitude of his supreme authority by the simple act of election, for Adrian v. died without taking any orders, and yet he promulgated decrees modifying the whole system of Papal elections, which by his successors, were held to be invested with all the sacredness of Pontifical utterances. Adrian v. ruled but twenty-nine days, in which interval he repealed of his authority the electoral constitution of Gregory x., which remained in abeyance until Celestine v., after six stormy elections, revived it in 1292. Undoubtedly such cases must be set down as obsolete in the concrete, yet at a critical moment like the present, when the Court of Rome is again imminently exposed to transformation, it is well to note remarkable instances of exceptional interventions which have been admitted by it, as at all events not beyond the pale of its principles.

In practice the *final* ballot is a mere formality. As soon as it is perceived that a canonical majority in favour of a candidate is really commanded, the matter is made known to the opposite party, so that acquiescing in defeat, its members may join in waiting on the future Pope the evening be-

fore his actual elevation. The contest therefore ceases habitually on the night before proclamation, and when the Cardinals, on the last morning, proceed to ballot, they do so, as a rule, with the perfect knowledge that they are going through a mere formality.

As soon as the ballot has furnished a return with a majority of two-thirds,—the scrutators having satisfied themselves in the event of its being a bare majority, that this is not due to the successful candidate's own vote,—and he himself has accepted the choice fallen on him, the Conclave is declared at an end, the doors are thrown open to the world, and in the chapel, where all the canopies are instantly lowered, except that over the newly elected, the Pope receives the homage of the assembled Cardinals, which is called the first act of adoration. Then, from the reopened balcony window, which has been walled up, the Cardinal Dean proclaims the new Pope, whose acclamation by the applauding Roman people is formally attested in a deed drawn up then and there by an appointed notary. Since the Quirinal has become the site for Conclaves, it has been customary to postpone the remaining ceremonies till the following day, when the Pope proceeds first to the Sistine Chapel, and afterwards down to St. Peter's, into which he is borne upon the *sedes gestatoria* to receive the second and third adorations. Seated on a cushion placed upon the high altar, the Pope has his foot and hand kissed in succession by each Cardinal, whom he in return embraces on both cheeks, the Cardinal Dean opening the ceremony and chanting the *Te Deum*, while his colleagues are performing their parts. This over, the Pope bestows upon the assembled multitude his public benediction; after which he returns to his residence every inch a Pope.\* There are indeed two other remarkable cer-

\* There are three streets in Rome with these names.

† There is indeed a decree by Stephen iii., 769, against the election to the Papacy of any one not an ordained Cardinal, but this decree, which was levelled against the anti-Pope Constantine, who happened to be a layman, has never been invoked on the occasion when the choice of the Sacred College fell on an individual not of their body, nor is there any other pontifical utterance on record in the same sense. Moroni himself admits that John xix. was a layman when elected, but preserves an ambiguous language in regard to the case of Adrian v.

\* The question as to when the creation of a Pope is consummated has been accurately discussed by Catholic writers, and it has been distinctly laid down by the highest authorities that election of itself invests a Pope with plenary powers. 'Qui eligitur Rom. Pontifex,' says Bellarmine, *De Rom. Pont.* lib. ii. cap. 22, 'eo ipso sit Pont. summus Ecclesie totius, etsi forte id non expriment electores.' Clement v. excommunicated those who 'asserere non veretur quod summus Pontifex ante sue coronationis insignia se non debet intrinicare de provisionibus, reservationibus, dispensationibus et aliis gratiis faciendis;' and Moroni, who enters at length upon the question, and must be considered the organ of the Court of Rome, declares that a Pope must necessarily be in possession of all his power from the instant of election, although he admits that this opinion has prevailed in the Church only since the days of Adrian v., the Pope who died a layman.

emonies of ancient origin connected with the installation of a Pope which must be noticed; but neither will be found to involve on his part any formula of oath or obligation. At an early day after election, in general on the following Sunday, the Pope is enthroned in St. Peter's, when he is crowned with the celebrated triple crown, the tiara. The ceremonies observed on this occasion are in part marked with a strange symbolism. In the Atrium of St. Peter, opposite the walled-up gate called La Porta Santa, which is opened only in the years of Jubilee, the Pope, seated on a throne, receives first the homage of the archpriest and all the clergy attached to the Basilica. This over, he is carried in procession up the church to the Chapel of St. Gregory, which is converted into a robing-room. On issuing from it a Master of the Ceremonies suddenly steps forward, and arresting the Pope on bent knee holds up to him a silver rod tipped with a bundle of tow, which a clerk sets on fire from a taper in his hand, the former officer singing aloud, '*Sancte Pater, sic transit gloria mundi.*' This curious piece of symbolism is repeated twice. At the high altar the Pope is clothed with the Pallium, and on the termination of mass, during which occurs the homage of clergy of all ranks, the Pope is borne in procession up to the balcony overlooking the piazza of St. Peter, where, in presence of the assembled people, the mitre having been first removed, there is placed on his head the renowned triregnum, by the second senior Cardinal Deacon, who pronounces the words, '*Accipe tiamam tribus coronis ornata et scias te esse patrem principum et regum, rectorem orbis, in terrâ vicarium Salvatoris nostri Jesu Christi, cui est honos et gloria in sæcula sæculorum.*' And with this ends the coronation after the giving of the benediction, which always follows every Papal appearance in public.\* The other ceremony is the taking possession by the new Pope of the Lateran Basilica, the Metropolitan Church not merely of Rome, but the Universe, as stands written

upon the inscription on its front. On this occasion, the Pope traverses the whole city of Rome in solemn procession, accompanied by all the Cardinals and the representatives of all the ecclesiastical hierarchy connected with the Court of Rome. Down to a very recent time it was customary for the Pope to ride a white steed, and to be escorted by the Sacred College on horseback. When Pius ix. made his progress to the Lateran, he expressed his desire to revive the practice, but the idea was abandoned owing to the remonstrances of the many very aged Cardinals, who protested their incapacity to sit on their horses for so long a ride. It was also the custom for the Jews to line the portion of the way between the Arch of Titus and the Coliseum, and there to present in sign of homage a copy of their law to the Pope; but since Pius vi.'s time they have been dispensed from this service. The ceremony in the church itself offers nothing that calls for special observation. It is simply an act of taking possession, unaccompanied by anything which implies a conditional tenure dependent on the observance of any specified and defined vows.

In the controversy waged as to what Pius ix. should do in regard to recent events, the advocates of a policy of acquiescence in what has befallen his temporal estate, have been freely met by the assertion that as Pope he is bound by oaths which absolutely interdict his doing so. On looking into the matter it will appear however, that this is not correct. Whatever oaths Pius ix. has taken have been sworn to by him freely, and of his own accord, in the plenitude of his authority, and not at all as conditional to his acquisition thereof; as happens with Cardinals who are invested with the *berretta* only after having repeated a prescribed oath. No Pope is subjected to any oath whatever, on being elevated to his supreme dignity, and if, at a later moment, it has been customary to swear the observance of certain ancient constitutions there is nothing to distinguish between the binding force of this oath and that of other oaths from which Popes are universally held to be able to absolve themselves, and from which, in regard to the very points under discussion, they have actually on several occasions dispensed themselves.

Nevertheless it is a received custom for Popes to swear the observance of certain Bulls and Constitutions—amongst which is one having special reference to the preservation free from waste of the endowments of the Church,—but these oaths are taken of their own free will, and in the exercise of their absolute powers, and by no means as necessary to their legitimate acquisition of full

\* A widely accredited error is that the benediction by the Pope from the balcony of St. Peter at Easter is given *urbi et orbi*. The phrase does not occur in the ritual, and has no authority whatever. Another popular error, to be found especially in the travels of the last century, is that at the coronation service there is chanted an anthem with the words *Non videbis annos Petri*. A curious and little known form was, however, observed on that day until very recent times. When the Pope rose in the morning a bronze cock was carried to him in procession, to call to his mind, at that solemn moment of elevation, the frailty of which Peter was guilty, and to which human nature is exposed.



pontifical authority. Soon after election the Pope holds a Consistory, but there is no fixed period when it must meet. Its convocation depends on his pleasure, and generally happens not more than two months after accession. On this occasion the new Pope has been in the habit to record his solemn adherence to divers regulations and instructions that have emanated from various predecessors, amongst which are to be particularly named a Bull by Julius II. (1503-13) declaring *ipso facto* void a Papal election due to simoniacal practices, and a Bull by Alexander VII. (1655-67) against the alienation of Church property. This is the instrument that has been invoked with much pertinacity by those who affirm that, in the matter of his temporal estate, the Pope is bound by ties absolutely depriving him of the power to make surrender of dominions he has succeeded to. We believe that it is necessary only to look a little into the history of this celebrated Bull to be convinced that there is no foundation for the exceptional sacredness thus ascribed to it, and which, if real, would at once limit the Pope's avowedly unbounded dispensing power in a perfectly posthumous degree.

The Bull of Alexander VII. does not profess to be an original statute, but merely a revival and confirmation of enactments by former Popes that had been either repealed or lost sight of, and the texts whereof are incorporated at length in this deed. The first of these instruments, and therefore the ground-work of the whole Bull, is one issued by Pius V. in 1567, which begins by expressing grief that 'divers persons too ambitious and covetous of rule' should have ventured to inveigle several Popes by false suggestions of policy into the step of infeoffing, under various titles, possessions belonging to the Church, whereby these had become alienated, to the signal impoverishment of that institution. Desirous to remedy this state of things, Pius V., as he goes on to say, had taken counsel with the Cardinals, who unanimously had sworn not only to observe the present constitution, but also 'neither to assent to any Pope's attempting alienation contrary to its tenor, nor to seek or accept any dispensation from the oath they had sworn to it.' Accordingly he proceeded to declare and pronounce all such infeoffments, grants, or alienations of Church possessions null and void, any persons guilty of counselling such hereafter, on any pretext, even of 'necessity or manifest utility,' incurring pain of excommunication by that fact; and to invest this Bull with the highest character of sacredness, the Cardinals present in Consistory swore to it by proxy for their absent

brethren, while it was also expressly ordered that this same oath should be administered to all future Cardinals *before* receiving the hat, and that it should be added to those taken by the Sacred College before entering a Conclave. Moreover it was enjoined that a new Pope, 'after his accession, should promise and swear the same, and after his coronation reiterate his promise and oath by special confirmatory rescripts, and that if this, which cannot be believed, were to be refused or postponed by the Pope, then, in the first secret Consistory, the Cardinals and specially their Dean, and with him the Capi d'Ordine, should incessantly and most pressingly with every instance ask, pray, and implore the observance of those presents, and take most diligent care that this should happen.' These very elaborate prescriptions received solemn confirmation in full from various subsequent Popes, until Gregory XIV. (1590) modified the binding force of the engagements he had himself sworn on accession, in conformity to custom, by the issue of a rescript highly illustrative of the absolute nature of Papal authority. This Pope, who reigned only a few months, was a vehement partisan of Spain in the war of the League, and was probably actuated in his relaxation of stringent obstacles in the way of turning property into money by his desire to assist Philip II. in his undertakings. The changes he wrought in the letter of the law were however shortlived, for Clement VIII. abrogated them by a Consistorial decree of the 26th June 1592, admitted into the body of Alexander VII.'s Bull, in which the very remarkable circumstances are recounted that marked Gregory's act of legislation. Pope Clement tells the world that as at 'a secret Consistory held at St. Mark's, on Friday the 13th September 1591, in which the opinions of the Cardinals present, among whom was His Holiness (Pope Clement himself), had not been asked for at all, and in spite of many distinctly speaking against, his predecessor had nevertheless declared and decreed that by the constitution of Pius it was not forbidden to infeoff anew a fief not yet lapsed, *when necessity or the manifest and true advantage of the Church* demanded this,—that the oath taken to it did not comprehend such a case,—and that no one could lawfully swear thus, because it would be contrary to the requirements and manifest advantage of the Church,—he therefore adjudged and ruled the aforesaid constitution to be henceforward so understood, that it would be unlawful for any one hereafter to speak or write otherwise thereof than as was then declared by him, in accordance with the contents of this decree and declaration.' The

whole of the saving clause ruled by his predecessor Pope Clement then cancelled, on the ground that the plea of requirement and advantage would only serve to leave a door open to alienations injurious to the Church, and this severe sentence against the personal disposition of Popes to enrich favourites at the expenso of the institution they were elected to preside over was endorsed by Alexander VII., when he especially included the whole text of Clement's rescript in his elaborate confirmatory Bull of every stringent enactment by predecessors on this subject.

From these facts, it results clearly that, however great the solemnity which successive Popes sought to attach to these prohibitory declarations against alienations of Church properties, it yet never amounted to a sacredness inviolable even for pontifical authority. The very circumstance of so many repeated confirmations by spontaneous Papal edicts would of itself be sufficient to set aside such a hypothesis. A dogma is not reaffirmed by successive Popes, but takes care of itself when once promulgated for all time, because its nature must be assumed to represent an eternal principle which, once recognised, stands forever an indelible member in the organism of the Church's doctrine. Moreover, the instance of Gregory XIV.'s declaration, and the terms of the reversal passed thereon by his successor, conclusively establish that there is no exceptional force for a Pope in the obligations attaching to this particular engagement. For Gregory XIV. had himself, in accordance with the original prescription of Pius V., confirmed on his accession the terms of the original bull, and yet in spite of this solemn act of adhesion had considered himself at liberty to issue his qualifying declaration of its meaning; while Clement VIII., who made no effort to disguise irritation at his predecessor's action, never introduced a word in the unfriendly language with which he mentioned his proceedings that implied a charge of Gregory's having exceeded the bounds of his lawful privileges—of having violated a fundamental vow—by those modifying declarations which he then was solemnly repealing in virtue of the same authority.

But even if we granted that there were aught in the oath so taken which put it beyond the range of the Pope's dispensing power to absolve himself therefrom, we must consider it a quite false reading of its obligations to make these refer to a limitation on the Pope's sovereign authority for surrendering territory in deference to dictates of policy and expediency. The whole scope of the Constitution was to set a check upon a prevailing system of scandalous favouritism

by which habitually Popes enriched their relatives with possessions diverted, it might be said fraudulently, from their legitimate object. The monstrous custom of Nepotism, which attained proportions that scorned all pretence at secrecy, was the object aimed at in the stringent provisions of these pontifical decrees, as every one who is not animated with a spirit of special pleading must see from their very wording. It is impossible for a candid mind to mistake the plain meaning of these very explicit and precise prohibitions levelled against making grants of Church property for the benefit of individuals, and against nothing else. The limitation of the sense attached to these decrees is so absolute, and so distinctly expressed, that only a deliberate spirit of perversion could venture on pretending to misunderstand its force. The groundlessness of the interpretations which it has been sought to set on the oath taken by the Pope is rendered still more clear by a second Bull he swears to along with the other, and which is coupled therewith as a sort of commentary and supplementary illustration. This Bull issued by Alexander VII., and known by the title of '*Constitutio Moderatoria Donationum*,' is so directly levelled against the immoderate grants made by Popes to their kinsmen as to name these without disguise, and to have put it beyond the stretch of the most wilful casuistry to attempt to twist the plain meaning of the text. A more confounding illustration does not exist of the practice once recognised in the Court of Rome than is here afforded by a Pope writing with a clearness such as to baffle the powers of misapprehension, or indulgent explanation. The preamble states that this Constitution is promulgated for 'the moderating of gifts and the distribution of ecclesiastical revenues to the kinsmen and connexions of the Pope, or to those adopted as such, and for the prescribing of safeguards to be observed in the assignment of favours which are said to have been at times granted by deputation, *per concessum*, during a Pope's sickness.' Accordingly it is ruled that a Pope may lawfully assist, should they be in want, his brothers, nephews, relatives, and connexions (*consanguinei et affines*), as also those whom he may have adopted as such, but only in the degree in which he habitually administers to the destitution of the poor who stand in no particular relation to him. Should any of the before-mentioned relatives enter the Church, it is enjoined that they shall be endowed with but moderate preferments; and in the event of any attaining to the Cardinalate, that they shall not be allowed to accumulate benefices exceeding in

value 12,000 crowns a year, it being expressly conceded that such income shall proceed from holdings for life,—any additional but insecure income from preferments held at the Pope's pleasure not being included in this estimate of the portion due to Papal kinsmen. Furthermore, to obviate the recurrence of what has happened in the case of favours granted by deputation during a Pope's sickness, and which exceeded what he would have sanctioned if acting for himself, Alexander VII. ordered that those invested with powers of deputation, even though by a Chirograph signed by the Pope's own hand, should under no circumstances be capable henceforth of granting any favour, except with the assent of two Cardinals, subscribing, in the Pope's presence, the deed of concession, which, without their signatures, shall be null and void. This Bull, issued in the first instance to restrain the arts and practices by which the spirit of the former prohibitions against Nepotism was evaded, stamps; beyond all controversy, the scope of those earlier Papal decrees with which it stands connected, and in conjunction with which subsequent Popes have sworn to it. The assertion, therefore, that the Pope (who, in every other respect is invested with absolute powers exceeding those of every other Prince) holds his temporal sovereignty by ties involving a limitation on his executive, for which there is no precedent in the conditions attached to the tenure of any other Crown,—ties that would reduce him to the condition of a helpless bondsman in a matter recognised to lie within the province of every sovereign's individual discretion by the fundamental principles of monarchical government,—may be fearlessly pronounced to be as unfounded an allegation as the fact would be a glaring and unparalleled paradox.

We have now brought to a close our survey of the elements that exist in the living organization of the See of Rome in relation to that capital function of its system—Pope-making. Much which is curious might still be added on a subject so vast and abounding in strange incident, but our object has not been to write a history of Papal elections, but to point out the provisions existing in the constitution of the Court of Rome for such purposes, and the facilities these may furnish for new combinations, if by circumstances recommended as expedient. It will have been seen that an organization which, at first sight appears framed on principles of the most rigid formalism, contains within it a vast stock of elasticity and capacity for adaptation to new forms. This faculty, as we have shown, has been called into play on various and capital occasions, and such

departure from precedent, under a wise regard for policy, has each time been approved of by the concurrent conscience of generations in the Church. The great schism was healed by one of the boldest and most revolutionary measures on record,—the creation of what was a religious constituent for the nonce,—calling into existence for a special purpose an electoral assembly without precedent. On other occasions, Popes have of their own authority dispensed with the most time-honoured and the most carefully enjoined prescriptions, when these were found contrary to sound policy; and the Church has never considered them to have exceeded their legitimate attributes by such stretches of authority. The constitution of the Court of Rome is therefore so far from being what it is generally supposed, a thing of strictly limited nature, over-weighted with the enunciation of absolute injunctions, that it will be found, when the heart of the system is reached, to be actually one of the most elastic in existence. Let only the instincts of the body representing the Church be alive to a necessity, however new, and the body can at once, without taint of illegal and revolutionary pretension, recognise the existence of new conditions. There is in fact no limitation on the plenary power of the governing body, in spite of the stringent formalism within which at first sight it seems to be tightly bound. If, then, it be the case that the circumstances now besetting the Papacy exact concessions from it for the removal of otherwise insuperable difficulties, it is certain that there is nothing in the nature of its tenure which must on principle put it out of the power of the holder of that dignity to make freely any such concessions as may be demanded by reasons of sound policy.

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- ART. II.—1. *Animal Chemistry*. By BARON JUSTUS LIEBIG. London, 1842.
2. *Die organische Bewegung in ihrem Zusammenhang mit dem Stoffwechsel*. DR. MAYER. 1845.
3. *The Food of Man in relation to his useful Work*. By LYON PLAYFAIR, LL. D. Edinburgh, 1865.
4. *On the Constituents of Food and their relation to Muscular Work and Animal Heat*. By J. C. DONDEES, M. D. Translated from the Dutch by W. D. MOORE, M. D. Dublin, 1866.
5. *Lectures on Animal Chemistry*. By W. ONLINO, F. R. S. London, 1866.

6. *On the Source of Muscular Power.* By E. FRANKLAND, F. R. S. Jour. R. Inst. London, 1866.

ONE of the authors above quoted says that the origin of muscular force in man 'is the cornerstone of the physiological edifice, and the key to the phenomena of the nutrition of animals.' It is undoubtedly one of the most interesting subjects in physiology, and has long engaged the attention both of physicians and physiciests. Their united aid has not, however, been given to the solution of the question, for disputes, often bitter and keen, have waged between the two classes of philosophers in relation to the influence exerted by the principle of life. The physicians, by means of their 'vital force,' could readily explain the most recondite process in the animal body, and no one could contradict their exposition, for this force is subject to no known laws, and the results of its operations are necessarily *sui generis*. The physiciests, on their part, refuse to admit a vital force, made to dominate over the other physical forces, and compelling them to act out of their usual course. This vital force they believe to be but the expression for that harmonious combination of the usual physical forces, such as heat, light, electricity, and chemical affinity, which sustain and develop that marvellous creation—a living animal.

As usual in such antagonistic views, there is much of truth and value in both. Many operations, which physiology once ascribed to vitality, are now known to be due to chemical affinity. The partition of chemistry into its old main divisions of inorganic and 'organic' is antiquated, for most of the substances supposed to be the product of vital action can now be made in the basins and retorts of the chemist. While there is probably no single constituent of the body, not even excepting albumen, which the chemist has not already made, or will not soon succeed in making artificially, yet it must be borne in mind that though he can constitute an organic compound, he has never approached the erection of an animal organ. The chemist may tear to pieces a living organ, and construct in the laboratory synthetically all its constituents, but he cannot put them together again, so as, by the appliance of physical forces, such as heat, electricity, or chemical affinity, to make them work with that harmonious combination which he views as life. The conflict between Pasteur and the advocates of spontaneous generations of living organisms is not yet ended, though, so far as it is gone, it is much in favour of the view that life does not arise through the ac-

tion of physical forces upon matter, even under the most favourable conditions. If not capable of being generated spontaneously, life must reside in a germ, which may spread itself by continuity, according to Darwin and his supporters, or be individual and special for each kind of living being. Let us admit with the physiciests that the body of an animal is a machine fed with fuel, and works by its combustion through levers, joints, and bands, in the manner of any steam-engine, still they do not tell us who is the engineer that keeps this machine in action. The heart, that most wonderful of organs, works incessantly, from the birth to the death of an individual, without any conscious effort on his part, and removed indeed altogether from his control. It is this superintending engineer who watches the working of the animal machine that physiologists call Life, and until physiciests have much clearer conceptions than they now have as to how the combination of their forces produces the wise direction of them, they can scarcely deny that their opponents have a right to refer to this unerring superintendence as something beyond the truth hitherto revealed by physical science. Admitting, as candid physiciests must do, that the residue of unexplained phenomena in the animal body may be due to a developed living principle residing in the embryo, but which has grown with the individual, and must therefore be obviously correlated to the known forces favouring this growth, we proceed to discuss the theories of the origin of muscular force or movement in animals, leaving out of consideration for the present the manner in which the brain issues its commands for the exertion of the power potentially present in the muscles.

We have already involuntarily fallen into the comparison of the body of an animal with that of a steam-engine. In fact, the Medical President of the Chemical Section of the British Association at Nottingham defined the living body of a man as a machine which took in oxygen and gave out carbonic acid during all its existence—a true description, but not a definition, for a common steam-engine does so also. The learned Dr. Mayow, a physician of Bath, nearly two hundred years ago, had much the same view; for he contended (see *De Motu Musculari*, 1681) that muscular motion is dependent on two things—the conveyance of combustible fuel, which he believed to be fat, to the muscles by means of blood, and the vital air, or, as we now term it, oxygen, to that fuel by the agency of respiration. A steam-engine does consume its fuel by means of oxygen, and the chemical affinity between

them passes into heat, which in its turn is converted into mechanical work. An animal body does the same thing, taking in fuel in the form of food, absorbing oxygen which has been inhaled into the lungs, and by the union of the two producing both heat to warm the body and mechanical work as manifested by muscular action. The steam-engine throws out carbonic acid and water by its chimney, and leaves the unconsumed part of the fuel as ashes. The animal throws out also carbonic acid and water by the lungs, and leaves the unconsumed part of its food as effete matter. So far the parallelism is complete. The steam-engine slowly wastes itself by the wear and tear to which it is subject, and in the course of a long term of years becomes unfit for use. The animal machine in a human body wastes so rapidly, in spite of the old tradition that the body of a man changes every seven years, that it probably becomes completely transformed in eight or nine weeks. Every part of the body is incessantly changing by death, and the new matter is built into the same form as the dead atoms which are absorbed and removed. The experience of the Morgue in Paris, shows that a body, after death, decomposes completely in twelve weeks. A living body, by the death of its individual parts, changes still more rapidly. The great rapidity of this waste has led some chemists to the belief that the animal body differs from a machine by using its own substance in the production of force; while others see in this excess of waste only the natural consequence of its substance being more liable to wear and tear than that of an ordinary machine. In the latter view, muscular effort is supposed to be effected, as motion is in a steam-engine, by fuel burned externally to the machine thus set in motion. These different views we proceed to examine.

In the first place, we take the theory of the venerable Dr. Mayow, whose opinions, dormant for two hundred years, have been lately brought into active life by Mayer, Donders, Frankland, Fick, and Wislicenus. In their latest aspect they are thus formulated by Professor Frankland:—

'1. The muscle is a machine for the conversion of potential energy into mechanical force.

'2. The mechanical force of the muscles is derived chiefly, if not entirely, from the oxidation of matters contained in the blood and not from the oxidation of the muscles themselves.

'3. In man, the chief materials used for the production of muscular power are non-nitrogenous; but nitrogenous matters can also be employed for the same purpose, and hence the greatly increased evolution of nitrogen under

the influence of a flesh diet, even with no greater muscular exertion.

'4. Like every other part of the body, the muscles are constantly being renewed; but this renewal is not perceptibly more rapid during great muscular activity than during comparative quiescence.

'5. After the supply of sufficient albumenized matters in the food of man to provide for the necessary renewal of the tissues, the best material for the production both of internal and external work are non-nitrogenous matters, such as oil, fat, sugar, starch, gum, etc.

'6. The non-nitrogenous matters of food which find their way into the blood yield up all this potential energy as actual energy; the nitrogenous matters, on the other hand, leave the body with a portion (one-seventh) of their potential energy unexpended.

'7. The transformation of potential energy into muscular power is necessarily accompanied by the production of heat within the body, even when the muscular power is exerted externally. This is doubtless the chief, and probably the only source of animal heat.'—Pp. 24, 25.

These views are clearly put, and we might proceed at once to examine them, could we take for granted that all our readers were familiar with the main facts connected with the nutrition of animals. We cannot assume this, however, and therefore pause to make some necessary explanations. In previous articles,\* the question of energy, in its relation to the various forces, has been so fully discussed, that we are justified in supposing that this relationship is understood. Potential energy may long lie dormant, and be converted into actual energy under favourable conditions. By converting the potential energy of muscles into actual energy, a man may draw the string of a cross-bow over the catch. As soon as the string rests on the catch, the energy is again stored up potentially in the bent bow. For a dozen years, or for a century, it may lie dormant in the cross-bow until some one touches the trigger; then the bolt is projected not by the force of the man who touched the trigger, but by the energy of the first man's muscles, which for so many years lay dormant in the bent bow. This sort of potential energy is stored up in food ready to be converted into actual energy under favourable circumstances. The sun shines upon plants, and its energy is absorbed by them during the production of vegetable substances fit for food. The solar force is, in fact, stored up in the plant, just as it was in the bent bow, and is ready to be brought out as actual power under favourable conditions. Dr. Odling puts this very clearly:

\**North British Review*, Nos. LXXXIX and LXXX.

'The vegetable organism is a machine in which the sun's energy is absorbed in the pulling apart of carbon and hydrogen from oxygen. The light and heat force emanating from the sun is rendered latent in the separated oxygen and hydro-carbon, just as human muscular force is rendered latent in the stretched cross-bow. When the separated hydro-carbon, in the form of some vegetable product, is recombined with the evolved oxygen, as in burning coal or wood upon the fire, or in consuming bread and oil and wine in the animal frame, the heat liberated in both instances is nothing more than the heat of the sun which had been stored up in carbo-hydrate and oxygen respectively. Conversely, the animal frame is a machine in which the sun's energy is set free by the recombination of that oxygen and carbo-hydrates, in the pulling apart of which it had been absorbed or rendered latent. The plant may be regarded as a miser or hoarder up; the animal, on the other hand, as a spendthrift or dissipator of the sun's force; but just as the miser is not a producer, or the spendthrift a destroyer of gold, so neither is the vegetable a producer, nor the animal a destroyer, of force. All modern philosophy combines to prove that force, like matter, is indestructible. It may be accumulated, but not created; dissipated but not destroyed.—P. 76.

All alimentary substances may be divided into two great classes. The first class contains albumen, fibrin, casein, and their modifications, and are found equally in plants and in animals. These substances are distinguished by containing about fifteen per cent. of nitrogen, or just the same amount as dried flesh and blood, from the composition of which they do not materially differ. Hence Liebig has called them 'the plastic elements of nutrition;' the name has been shortened in this country into the more convenient term of 'flesh-formers.' According as these are more or less present in food, so is that food, if other nutritive conditions be not wanting, more fitted for building up the fabric of the body. Lean meat consists almost wholly of these flesh-formers, among which fibrin is predominant. The white of an egg offers them in the form of albumen, as the curd of cheese does in that of casein. But they are not confined to substances of animal origin, for the fibrin abounding in beef is largely found in wheat flour; the albumen of the egg may be extracted from cabbages; and the casein of milk is present in still larger quantity in beans and peas. All of them are originally derived from plants, for animals seek them out from the vegetable food which they consume, and merely deposit them upon their bodies. Nor do the carnivora form an exception to this law of nutrition, as they feed on herbivora, which yield to them the materials for their flesh. The process of animal nutri-

tion, so far as building up the body is concerned, is remarkable in its simplicity. Plants, having no high functions of volition to perform, become the laboratory of animal life, and prepare the materials of flesh and blood. Animals merely extract these, and give to them a place and form in their organism. The second great class of alimentary bodies consists of starch, sugar, gum, and fat, which contain no nitrogen, and therefore cannot build up animal organs having fifteen per cent. of that element. Their main function, according to Liebig, is to support animal heat, which, in the warm-blooded animals, is always considerably above that of the surrounding atmosphere. These substances burn readily, and produce a large amount of heat in their combustion. The gaseous products of their union with oxygen are carbonic acid and water, precisely the same bodies which escape from the human lungs. Combustion within the body is attended with the evolution of as much heat as when it takes place actively outside the body. The fact that there is flame in one case, and not in the other, is the mere accident of the rapidity of combustion. When iron rusts in air, it gives out just as much heat as when it burns with bright scintillations in a smith's forge, but the evolution of the heat is spread over a longer time. So when sugar or starch burns within the body, the amount of heat developed is the same as if they were consumed in an open fire; the only difference is, that the heat, being produced slowly in the former case, is absorbed by the blood and tissues of the animal, so as to heat them to a temperature of about 99 degrees Fahrenheit. This alimentary fuel enables the body of man to retain a uniform temperature under the most varying conditions of climate, for the appetite regulates the amount required to sustain the animal heat. Modern physiology is not so restrictive as Liebig was in his first announcement of this division of alimentary substances into flesh-formers and heat-producers; for while it is admitted that albuminous bodies have for their special function the formation of the organism, it is now certain that they can also act in the maintenance of animal heat. The second class, or the non-nitrogenous bodies, cannot perform this double office. They may, and no doubt do, act chiefly as 'the heat-givers,' but they never can play the part of flesh-formers.'

This brings us back to our main subject; for while chemists agreed upon the view that starch, sugar, and fat cannot form the organs of the body, they are in conflict as to their power of producing muscular force. One section of chemists, headed by Liebig,



contend that the main function of non-nitrogenous food is the production of animal heat and not of muscular force, while the other section believe that muscular power is their primary function, and animal heat the secondary effect. Both sections of chemists rely upon numerical results in support of their views, and we proceed to describe the manner in which these are obtained. When a man is at rest, he expires a certain quantity of carbonic acid; when at work, a much larger quantity. Thus a laboring man, during one hour of rest, exhales 130 grains of carbon in the form of carbonic acid, and during one hour's work, 530 grains of carbon. This excess of carbon burned in the body during work is viewed by many chemists as a proof that starch, sugar, and fat—the non-nitrogenous fuel—is consumed in the muscular force which enables the laborer to do the work. At all events, three-fourths of the increase must be due to such bodies. But while gaseous carbonic acid escapes from the lungs, a solid form of carbonic acid, containing nitrogen, or amido-carbonic acid, passes away in solution *per vesicam*, having been secreted by the kidneys. It is well known as *urea*, and is the representative of wasted muscles when no food has been taken, and of these, *plus* any excess of albuminous food beyond that required for the supply of waste, when too much aliment is introduced to the body. Besides this *urea*, which is the chief constituent of the ural secretions in man, small quantities of other nitrogenous ingredients are found, but for our present purpose are unimportant. Suppose that a laborer lives without gluttony, it is only necessary to ascertain how much *urea* has passed out *per vesicam* in twenty-four hours, then to multiply this amount by three, and we obtain the quantity of dry flesh which has been wasted during the same time by the wear and tear of the body. It is agreed that ordinary men, in good health, evacuate 520 grains of *urea* in twenty-four hours, while they emit the equivalent of 65 grains by other secretions; hence we ought to find, multiplying these numbers by three, that they should have 1755 grains of albuminous substances in their daily food. The experience of mankind does in fact show that they consume four ounces, or 1750 grains daily, of dry albumen, so that theory and experience in this respect closely agree. A really hard-worked labourer passes between 700 and 800 grains of *urea* daily, and consumes  $5\frac{1}{2}$  ounces of dry albuminous food. As it is possible, then, by means of the excretions, to ascertain the extent of muscular waste, it becomes a mere matter of calculation

to determine whether the amount of potential energy resident in the wasted muscles suffices to account for the work performed, or whether it is necessary to supplement this by the combustion of the non-nitrogenous portions of food. The potential energy in flesh resides in the chemical affinity which it possesses for the oxygen dissolved in arterial blood. The oxidation resulting in the display of energy has been calculated by Playfair to produce as much heat as is represented by 4450 calorific units. In other words, one gramme of flesh in oxidizing could heat 4450 grammes of water one degree of the centigrade thermometer.\* A year after this estimate, made upon theoretical considerations, Frankland experimentally determined the calorific value of beef muscle, and found it to be 4368 units; and as the experiments differ about 100 units from each other, we may safely assume Playfair's theoretical estimate and Frankland's experimental one to be identical, and take 4400 as in round numbers the calorific value for one gramme of flesh. The beautiful researches of Joule have taught us how to express a certain amount of heat by its representative of mechanical work. His experiments show that if we multiply the above number by 425, the 'mechanical equivalent' of heat is obtained; or the product signifies the number of grammes weight which could be raised to the height of one metre by the potential energy of the gramme of muscle. The figures thus obtained being too large to deal with conveniently, it is usual to refer to kilogrammes (1000 grammes), and to indicate the mechanical work of so many kilogrammes raised to the height of a metre. Calculated in this way, one gramme of dry flesh or albumen ( $15\frac{1}{4}\%$  grains English) has potential energy enough to raise 1870 kilogrammes to the height of one metre. As the ordinary diet of a man is four ounces or above 113 grammes, he ought to have in the transformed muscles of his body potential energy enough to raise 211,310 kilogrammes to the height of a metre. The actual external work of such a man is represented by a daily march of seven miles, which is the common soldier's exercise when in barracks, and this represents only 38,000 metre kilogrammes of work. Deducting from the potential energy 60,000 metre kilogrammes for the internal work of the body, such as the action of the heart, lungs, and

\* We use French weights and measures, in deference to the growing feeling that the metric system should be followed by this country in all subjects relating to science. A kilogramme equals 2.2 lbs. English, and a metre 1.09 yard, or a little more than 39 inches.

intestines, all of which exercise mechanical force measurable in amount, we have still, according to Playfair, upwards of 150,000 metre kilogrammes of energy to do 38,000 of actual work. A *prima facie* case is thus made out for Liebig's view that muscular waste may be the source of work in animals.

His opponents, however, proceed to test it by inducing excessive work, and ascertaining whether that is attended by a corresponding excessive waste in the muscular system as displayed by a large increase of urea in the secretions. With this view, two philosophers of Zurich, Fick and Wislicenus, ascended the Faulhorn, a mountain which every one knows rises above the lake of Brienz to a height of 2000 metres. For thirty-one hours previous to the ascent, they fed themselves on starch and fat, the chief non-nitrogenous constituents of food, obviously for the purpose of relying on the already formed muscles in the body to accomplish the ascent, if the power resided in them. During the night previous to the ascent, they determined the amount of urea secreted, then that eliminated during climbing, ascertaining also the quantity passed in the six hours succeeding the work, and finally the amount secreted during the night after they had partaken of a hearty dinner, from which meat was no longer excluded. The experiment was in fact of remarkable interest, and seemed to give all the necessary data for the determination of the question. The weight of their bodies and accoutrements having been determined before starting, and the height of the mountain being known, the number of metre kilogrammes of work performed by them in the ascent could be estimated. Was this work represented in the urea formed during the ascent and for six hours after it? The amount of urea secreted during the ascent and for six hours after it showed that thirty-seven grammes of dry muscle had been wasted, and these could have developed seventy thousand metre kilogrammes of mechanical force. But in raising the body to the top of the mountain, and in supporting the action of the heart and respiratory organs during the ascent, the pedestrians had actually expended nearly one hundred and sixty thousand metre kilogrammes of force, or more than double the amount which could have been afforded by the transformation of the muscles. This assumes that all the potential energy resident in the muscles could be converted into useful work. Now, with all the improvements in the steam-engine, only one-tenth of the power evolved from the fuel while burning is transformed into mechanical work. Haid-

enhaim, however, has shown that a muscle during work may convert as much as one-half of its energy into useful work, and if we take this as the utmost limit of economy of the human machine, we must admit, with Fick and Wislicenus, that not one-fourth of their labor in ascending the Faulhorn could be attributed to the muscles expended in the effort. Their conclusion, therefore, appears justified that the non-nitrogenous constituents of food, the starch and sugar upon which they subsisted, must have helped them to accomplish the work, or, as they contend, have been the whole source of the power. These experiments have been taken by Frankland and others without cavil, and are assumed to be quite conclusive. To our mind they are not so, and contain within them grave errors. The chief objection to their conclusiveness is, that the period of production of urea within the body is not the period of its elimination from it. Dr. E. Smith, in his experiments on prisoners on the treadmill, and on himself, in the daily avocations of his profession, has shown that irregularities in labour and diet, and even changes in the barometer and thermometer, retarded the secretion of urea, so that the quantity produced in one day may not pass away till the second or even third day. Precisely these conditions were present on the Faulhorn, for at the summit there was a low condition both of atmospheric pressure and temperature, the very conditions which had previously been pointed out as powerfully retarding the elimination of urea. The philosophic mountaineers ascended under a peculiarly unusual diet; their starch cakes, fried in fat, must have tested their digestive powers in no common degree. Under normal conditions of diet, the amount of nitrogen in the solid excretions is only about one-twelfth that in the liquid; but if there are digestive difficulties to overcome, as when a dog is fed on starch and fat alone instead of flesh, then the amount of nitrogen in the solid excretions increases, according to Bischof and Voit, to an amazing extent, generally exceeding the amount in the liquid excretions. The reason for this augmentation is, that the solid excrements of an animal chiefly consist of the exhausted ferments used up by the digestive fluids in overcoming difficulties to assimilation. Now Fick and Wislicenus have overlooked this circumstance altogether, and do not tell how much nitrogen was present in the alvine secretions. In the absence of such information, their experiments lose much of their value. Even on their own theory, that the animal body is a machine like a steam-engine, supplied with non-nitrogenous fuel, and exhibit-

ing a waste displayed in the urea as a consequence of mere tear and wear, we should have expected that the urea, as the representative of the friction of the machine, should have been increased proportionately to the heavy work of the ascent, although the actual increase might have no numerical relation to the origin of muscular force. The following numbers are those given :—

Urea for twelve hours before ascent,	46 grammes.
Urea for six hours of ascent,	22
Urea for six hours after ascent	16
Urea for twelve hours of rest after dining	32

The experiments, in fact, prove a great deal too much, for while they indicate that the urea is not secreted in proportion to the work performed, they show likewise that when the machine is exposed to heavy tear and wear by excessive work, the waste by friction is considerably less than it was for the twelve hours before the ascent, when the pedestrians slept comfortably in their beds on the shore of the lake of Brienz. This fact ought to have made them suspicious either that all the waste matter had not been eliminated during the short term of their experiment, or that it had escaped in other directions than *per vesicam*.

For the reasons stated by us, we do not consider that the celebrated ascent of the Faulhorn has settled the important question of the origin of muscular force in man. Nevertheless, we are not inclined to disbelieve the view that occasionally, and under peculiar circumstances, the corporeal machine may be fed with non-nitrogenous fuel. Vicarious action is common in all parts of the body. The skin assumes the functions of the kidneys when their action is retarded; the latter, and even the intestines, remove those portions of water from the system that impaired lungs are unable to carry off as vapour. Both the skin and the lower intestine can, under exigency, perform the function of the upper intestine in absorbing food, as instanced in the nutritive injections and soup-baths which supported a former King of Prussia in his last illness. The stomach occasionally does some of the duties of a defective uterus. When the blood refuses to oxidize non-nitrogenous fuel so as to convert it into carbonic acid exhaled by the lungs, the skin comes to its aid, and removes it in the form of marsh gas. In fact, all through the body, means are provided for effecting, under difficulties, by extraordinary means, the ordinary actions intrusted to certain organs. So that it is not surprising to find

a compensating action as regards muscular energy. Nitrogenous fuel might be the ordinary and proper material for muscular action; yet, as a temporary substitute, non-nitrogenous fuel might be applied, not, however, without a certain deterioration of the machine. It is therefore possible that, if all the necessary corrections were made to the experiments of the Zurich physiologists, there would still be found a large amount of actual work which was performed by the use of starch and fat as fuel, in substitution of that which is commonly employed. In the case of 'underfed and overworked prisoners,' carrying out their punishment on the treadmill, Dr. E. Smith found that more work was performed than could be attributed to wasted muscle, but the men were running down in strength, and could only be put upon their labor every second or third day. This modified view of the subject is not admitted by Frankland and his supporters. They contend that not in man alone, but in lower animals, there is evidence that the non-nitrogenous food—the starch, sugar, and fat—is the source of muscular work. Bees are brought in support of this view, for honey consists chiefly of sugar, and contains but a small amount of nitrogen as an albuminous mixture. Yet bees subsist upon honey only during the winter, precisely at that period of the year when they have scarcely any work to perform. During summer, when they work hard to form this winter store, their food is not exclusively saccharine, for the pollen of flowers, which, in the form of *bee bread*, forms the chief food of the larvæ, is also consumed by the working bees, and is in itself highly nitrogenous. The mouth of the butterfly is only adapted for the suction of honey from flowers, and yet it uses much muscular exertion in its lengthy flights; but we are certainly sceptical as to Verloren's statement that this honey is free from nitrogen, for the excrements of butterflies are rich in that element, and can only have been derived from the food taken. Insects are cited by the advocates of the view now under consideration as offering powerful arguments in favour of their theory, but they may likewise be brought in strong opposition to it. For the theory supposes that the non-nitrogenous fuel is brought in the blood to the muscles, where it is used for the production of mechanical effects; but as insects have no true blood, it is difficult to see how they support this view.

We have endeavoured to state fairly the views of one set of chemical physiologists, though we have not hesitated to express our dissent from them in some cases; and

we now proceed to discuss the opinions of their opponents.

There seems to be no doubt that the oxidation of the substance of a muscle can produce muscular force. If a living bundle of muscular fibre, white and free from blood, be excited electrically, it shows muscular irritability by contracting, and, if attached to weights, will raise them, thus doing actual work. The amount of electricity required to produce this irritability is so small, that it has no relation whatever to the work performed. A muscle is only contractile in the presence of oxygen gas, so that its work is obviously the result of oxidation. But as muscular fibre contains fat, a non-nitrogenous substance, as well as nitrogenous fibrin, its contractility might be supposed to be due to the former body and not to the latter. Helmholtz has discussed this question by examining the changes of a muscle before and after contraction, and he found that, while the substance of the muscle wasted by oxidation, the fat remained unaffected. Electric excitement is not always necessary for its manifestation. We have seen the heart of a shark removed from the animal and drained of blood exhibit its regular valvular action for a quarter of an hour. The head of the same fish, cut off from the body, can bite fiercely with its jaws for some minutes. This retention of muscular power is well marked in a curious fish of the White Nile, the *Tetrodon Physa*, regarding which Baker states that 'many minutes after the head had been severed from the body the jaws nipped with fury anything that was inserted in the mouth, nipping through thin twigs and thick straws like a pair of shears.' The heart of the turtle continues its action for a long period after being extracted from the newly-killed animal. The irritability of a muscle removed from the body, cut off from blood, and working under electric excitement or spontaneously, seems without question to derive its power from the oxidation of its own material. And if this be true of detached muscular fibre without the body, it is probably also true of muscle *in situ* within the body. There is, in fact, no doubt that nitrogenous substances free from fat can support muscular force perfectly well, the only question being whether they act as fuel external to the muscle, or are first built in as part of its structure before being used to produce muscular power. The Jews, who have retained the characteristics of their race, as well as their corporeal health and mental activity, for a long series of years, carefully remove fat from their food before eating it, in obedience to the Levitical law: 'This shall be a perpetual

statute for your generations, throughout all your dwellings, that ye eat neither fat nor blood.' As the chemist may, however, contend that a mere mechanical separation does not take away all the fat concealed within the muscular fibres, we proceed to quote experiments to which this objection does not apply. Two German physiologists, Bisehof and Voit, carefully freed flesh from all its fat, by chemical means, and fed a dog upon it for a month; this dog kept perfect health, and worked a treadmill doing 150,000 metre kilogrammes daily. Savory fed rats on a similar diet, and found that they also could live well on nitrogenous matter free from fat, starch, and sugar, and carry on their usual muscular efforts. The purely nitrogenous diet had thus a double power for while it kept the muscles and other organs of the body in repair and fit for their usual functions, it at the same time supported the animal heat. Non-nitrogenous diet cannot effect this double purpose, for, though well-fitted to support the internal heat, it cannot repair wasted tissues, and therefore is not fitted to support life *per se*. Bisehof fed a dog upon a mixed diet of flesh and fat, increasing the proportion of the latter gradually, and found that, while the fat was laid on to the body, the nitrogenous portion of the food became oxidized in preference, and appeared as urea in the excretions, showing that it is peculiarly susceptible to that oxidation which is the origin of all force in the body, whether it manifests itself as heat, electricity, or muscular power.

If our readers have followed these observations, they will find the question much narrowed. There is now a common agreement among all chemists and physiologists:—

1. That purely nitrogenous diet can support living tissues and produce muscular force.

2. That non-nitrogenous diet *per se* cannot support living tissues, or permanently sustain muscular force.

The question is now limited to this: In the mixed diet of mankind is there sufficient nitrogenous matter to account for muscular force under ordinary circumstances? Frankland denies this in the lecture which we have quoted, and Playfair affirms it. The latter chemist appeals to the ordinary experience of mankind, and refuses to allow abnormal experiments, such as those of Fick and Wislicenus, to be considered as bearing on the question; for while he does not deny that muscular force may be exceptionally produced by the combustion of non-nitrogenous fuel, he at the same time contends that this source cannot be continuously re-

lied upon without producing a rapid and fatal deterioration of the system. Before proceeding to numerical data, let us take the argument of common experience in its general aspect. It is well put by Donders, the Dutch professor, whose work we have quoted, and whose evidence we may readily take, as he is an unwilling witness for this side of the controversy, his views being nearly the same as those of Frankland:—

‘Now, is it a matter of indifference what food animals use? Experience has taught us the contrary. Highly bred horses need highly nitrogenous food. Their excellent qualities are developed under the influence of such aliments, combined with exercise and care for perfect transpiration. Thus in these horses the cubic centimetre of muscle has reached a higher labour value than in any other working animal. In order not to degenerate, they now require such food, and require it permanently. The Arab never lets his horse eat grass and straw to satiety. His chief food is barley, and in the wilderness he gets milk, and if great effort be required, even camel’s flesh. The horses which, in the Sahara, are used for hunting ostriches, live nearly exclusively on camel’s milk and dried beans. Of our horses, too, it is well known that in order to do heavy work they require more than grass and hay. Oats are necessary to give strength and activity; and while running the food preferred for the horses is bread. I have consulted many innkeepers and coachmen upon the feeding of horses. Their verdict has been unanimously as follows:—“The oats must be in them. If they come from the farmer they are round and plump, for the farmers feed well. But such horses are not fit for our use. They sweat directly, and cannot bear a hard run. The oats must be in them.” . . . The conclusion is this, that the best and noblest racers are developed and maintained upon a diet abounding in albumen, and that each horse is better adapted for work when fed upon oats, bread, and beans, than upon hay and grass. The labour of oxen is far behind that of horses, but these animals are still used in the Netherlands. In general they live on grass and hay; but if they have hard work to perform they get, with a more liberal allowance of their ordinary food, the so-called “oxen bread,” baked principally of bean meal, and consequently rich in albuminous matter. Without this bread they fail in their work.

‘What we read of the rein-deer is important. Brücke tells us that in one day it not unfrequently runs for nineteen hours, performing 150 English miles, and yoked to a sledge of 240 pounds. This work is equal to that of four Esquimaux dogs. Now, in the Imperial Menagerie at Schönbrunn, a rein-deer gets as his daily food about five pounds of Iceland moss. But Brücke tells us that the food of the rein-deer is not always so sparing, that in summer he seeks the mountain pastures, and in winter lives on the parasitic plants of the forests, and for want of other nitrogenous food catches and devours field-mice. . . . On the whole, we come

to the conclusion that animals, to perform work, *constantly* use not only a larger quantity of food, and therefore proportionately more albuminous matters, but that they further require for their labour a more highly albuminous diet.’—DONDERS, pp. 33, *et seq.*

The facts which Donders has so well brought forward in the quotation just given with respect to animals might readily be supported by similar facts in relation to man. Even in the same country we see races with national characteristics very much dependent on the quality of their food. In Hindostan the rice-eaters of the plains are weak and effeminate in comparison with the men who feed on the leguminous plants of the Upper Provinces. The Ghoorkas, who came to our aid when we were so sorely beset in the late mutinies, are flesh-eaters like ourselves. In Africa the distinction between poor and rich feeders of nitrogenous diet is still more marked. Whenever a strong and energetic tribe is described by travellers, we find that they tend cattle carefully, and in some instances cultivate cereals,—for both of these bucolic arts yield a more steady amount of flesh for men than the chance supplies of the hunt, or than the roots, field-mice, snakes, and white ants of the more wretched tribes. The finely-built savages of the White Nile not only milk their cows, but *bleed* them, in order to get nitrogenous food. ‘They bleed their cattle periodically, and boil the blood for food. Driving a lance into a vein in the neck, they bleed the animal copiously, which operation is repeated about once a month’ (Baker, vol. i. p. 81). In the use of blood they are like the Eskimos and Samoyeds who, Richardson tells us, drink a good deal of fresh blood ‘when they require to use much exertion, as in hunting,’ although they derive it from freshly killed animals. In South America the food is often as indifferent as the character of the races which inhabit many parts of it; but when actual labour is performed, as it is by the Guacho who sits all day in his saddle, then Darwin tells us that lean meat is consumed in surprising quantity. The miners in the Andes, who have to work like horses, are fed very much in the same manner, for it is found necessary to supply them liberally with beans, a diet abounding in casein. The Egyptian labourers on the railways and canals were found to be nearly equal to English navvies after the contractors supplied them liberally with albuminous food, but they cumbered the ground with their dead when their enforced labour was extracted from the diet which had sufficed for their usual sluggish work. As our space does not permit us to enter

largely into this part of the subject, we content ourselves with another quotation from Donders:—

‘Men who actually perform work also use albumen, and in general consume more in proportion to the severity of the labour. The quantity of food is great, surprisingly great, we will say, if we visit the tables of the country people, who do heavy work, and proportionate thereto is the quantity of albumen ingested. They get more albuminous matter than one suspects, for, besides potatoes, they use different kinds of flour and bread in great quantity, and every evening trencherfuls of buttermilk, which contains all the casein of milk; and in the middle of the day pork and bacon. For soldiers in garrison Mulder calculated 100 grammes of albuminous matter daily, and for sailors still more. In a yard visited by me, strong men were employed nearly all day in sawing planks. They got high wages, and required it, for “without a pound of meat daily and a good jug of beer, one could never hold out at that work.” Thus too the guide, who daily ascends mountains and helps the traveller to carry his valise, must be well fed, and especially requires animal food.\* Of the English labourer, who daily gets meat and drinks strong beer, we know that he is strong and active, and that the Irish people, who live almost exclusively on potatoes, are called lazy and slothful. I have often remarked that slothfulness is rather a morbid symptom than a vice.’

We would supplement this general summary of facts by the experience of men training for athletic sports, more appreciated in this country than in that of the Dutch professor. If fat and starch be the main motive power of the muscles, we would expect that these should be given in liberal proportion during a course of training for muscular activity. The very reverse is the case, for the diet is made as much as possible to exclude farinaceous and fatty food, and to depend upon the assimilation of lean meat. So much is fat avoided, that part of the

training for the Oxford and Cambridge boats' crews consists in making the men run a mile daily, or walk five miles briskly, in order to get fat out of their muscles. On the day of the race, it is usual to give only a light breakfast of lean mutton-chops, from which fat is carefully cut off, and a limited amount of toast. It is extraordinary, if fat and starch are the conditions for muscular activity, that our athletes should not only never have found out their merits, but have taken such a singular aversion to them. In the actual rowing-match or prize-fight, however, when the muscles have been well developed, we may hope to find theory triumphant, and that now non-nitrogenous food is supplied as fuel to the animal machine so sorely tried. Yet even then we do not find the seconders, or bottle-holders, pouring arrowroot or oil down the throats of the men at their periods of rest, though they encourage them to rely wholly on their existing muscular fibre, and merely give lemons to suck, or other means of assuaging thirst. The systems of training differ, sometimes having absurd requirements, but all of them—the Oxford, Cambridge, Stonehenge's, Clasper's, Westhall's systems—are of one accord as to the necessity of putting a strict limit to the amount of fatty and farinaceous articles of diet. As athletes, however, are not philosophers, their experience may be inferior to the theories of those chemists who differ from it. Yet, as these theories are still under discussion, we confess a leaning to the long-gathered experience of the world.

\* ‘Our experience of mountain climbers is the same as that of Donders. We have seen some of the most celebrated members of the Alpine Club, and some of the most enduring of the Alpine guides, laying in the fuel for the ascent of their bodily machines, and have marvelled at the wonderful amount of animal food which they consumed. And yet Frankland, along with Fick and Wislicenus, quotes an observation of Dr. Piccard, ‘that chamois-hunters are accustomed, when starting on long and fatiguing expeditions, to take with them as provisions *nothing* but bacon-fat and sugar, because they say these substances are more nourishing than meat.’ As we write this, we happened to meet the American General who acted as Quartermaster-general in Sherman's famous march. We asked him, ‘As you had to depend upon bacon largely in this fatiguing march, did you like to supply it to the soldiers fat or lean?’ His reply was, ‘As lean as we could possibly get it, for unless we got lots of lean meat into them they broke down.’

The treatise of Playfair, which we have quoted, examines the question by the results of long-established experience. All nations have an interest in keeping their soldiers and sailors in good health and fit for work. The public dietaries, which have been adopted as the result of long experience, are singularly accordant in the amount of nitrogenous matter furnished to the soldier; while they are, at the same time, variable in the quantities of non-nitrogenous food. As the latter may consist of fat, starch, or sugar, it is usual to reduce it to a common standard for comparison, the whole being calculated with its equivalent of starch. The following numbers indicate the daily dietetic supply of nitrogenous and non-nitrogenous aliment in ounces, and tenths of ounces, to soldiers of various nations while they are on the peace establishment:—

	Nitrogenous Aliment.	Non-nitrogenous Aliment.
English soldiers . . .	4.2	22.6
French “ . . .	4.4	22.5
Prussian “ . . .	4.0	22.1
Austrian “ . . .	4.2	21.0



These numbers are singularly accordant, although the articles of food supplied to give the chemical nutritive ingredients are very diverse. As an average  $4\frac{2}{10}$  ounces of dry albuminous food suffice to keep an ordinary man in good health. We have already shown that the work of a soldier during peace does not exceed 38,000 metre kilogrammes, while the potential energy of the nitrogenous matter in his food is upwards of 200,000. We quite agree with Donders that the work of a labourer, when actually measured, does not often exceed that which any man fed like a soldier in garrison might readily perform :—

‘People are deceived as to the amount of work performed. Most callings require rather an accurate use than great tension of the muscles. In fact, the work performed by the human hand is, when measured by the accurate standard of kilogrammeters, in general very little. If the manufacturer of fabrics was called to perform hard work, to carry heavy loads, or to overcome great resistance, it would be soon seen how little he is fitted for the purpose. Even his very appearance betrays it. On slender food and under unfavourable circumstances, his physical condition is lowered to a degree at which it can now be maintained by slender diet.’—P. 44.

Although a large number of the labouring classes perform their daily routine of labour with but a small expenditure of actual energy, still there are exceptional vocations in which much real work is accomplished. The ‘navvies’ on our railways belong to the class of actual workers, and are, at the same time, heavy feeders. We prefer to take actual weights when speaking of dietaries, for mistakes frequently occur in such statements as those of Frankland, that the diet of navigators consists ‘of thick slices of bread surmounted with massive blocks of bacon, in which mere streaks of lean are visible.’ Gasparin discussed the nutritive value of the food daily taken by English navvies while constructing the Rouen railway, and found it to contain  $6\frac{8}{10}$  ounces of flesh-formers; and Letheby, describing that of the navvies who constructed the railway during the Crimean War, estimates it as affording  $5\frac{7}{10}$  ounces, while Christison gives 8 ounces as the amount consumed by the labourer in reaping the harvest in Scotland. These numbers show that the active labourer takes considerably more albumen than an ordinary man not exposed to heavy work. England, when it sent its soldiers to labour in the trenches and fight in the field during the Crimean war, first began to feed them on a peace diet,\* for this is the only nation

which has not yet established a ‘war diet’ of a more generous nature than that used in garrisons. The result was the humiliation of our country. The labourers in the trenches, not having in their food sufficient energy to transform into work, succumbed under their fatigues and privations, and died by thousands. When the outcry became loud in England, then the War Office began to improve the diet, and raised the flesh-formers by about half an ounce daily, though the experience of all other countries shows that a soldier cannot go through active warfare without a daily supply of at least six ounces of dry albuminous matter in his food. Rather more than this quantity was given to Prussian soldiers in the recent Bohemian campaign, and we know the marches and fighting which they accomplished. The Austrians gave only about five ounces of flesh-formers daily, and even this amount was not uniformly afforded, owing to their wretched system of commissariat. We were in Germany before the end of the war, and had the opportunity of examining the muscular condition of several regiments of soldiers who had gone through the campaign, and arrived at the conclusion, that though the needle-gun may have given to the Prussians immediate superiority in the field, their excellent commissariat was a still more powerful cause of victory. A soldier in a campaign is worked hardly when he has to march, without rest, fourteen miles daily, laden with sixty pounds weight of accoutrements. This is equivalent to a labour of raising 776 thousand pounds to the height of one foot, or, in round numbers, about 107 thousand metre kilogrammes. To this must be added 60,000 for the internal work of the body, so that at the outside, 167,000 metre kilogrammes would represent the average daily work of a campaign. In the six ounces of flesh-formers supplied during the Prussian war, the soldier, after deducting the amount which is expended in digestion, finds potential energy enough to do 290,000 metre kilogrammes, having, as we have seen, but 167,000 to perform. On the interpretation of these numbers, we again find the chemists disagreeing. Frankland says that the body could not be expected to work so economically as to convert more than one-half of its potential energy into useful work, and that, therefore, 334,000 metre kilogrammes should have been provided instead of 290,000. Playfair, on the other hand, refuses to admit that nature

\* Our Commissariat has deteriorated in England,

for Froude tells us that the hardy soldiers of Henry VIII. had a daily supply of 2 lbs. of meat, and 1 lb. of bread.

is so extravagant in her expenditure of force. This idea of her wastefulness has arisen from our want of success in an economical application of force to steam-engines. But the body of an animal is a wonderful machine, and, admittedly, expends force with a surprising economy. To multiply one number by two, and then deny its accordance with another, which has not been thus arbitrarily increased, is not science, but the advocacy of a foregone conclusion. A campaign is, after all, but a doubtful test of the question, for, putting aside the frequent additions to rations got by foraging, it is rare to find the bodies of soldiers in prime condition after the conclusion of their severe labour. Neither is it easy to decide the question by the work performed and the food consumed by peaceful labourers, for their intelligence is rarely of that order which gives assistance to the scientific inquirer, without reservation or suspicion. In the tables given by Playfair, we find the flesh-formers consumed by really hard-worked labourers varying from five ounces to ten ounces, the latter high number being taken by prize-fighters during training.

It would, on the whole, be better if we had accurate data as to the habitual work and diet of animals, such as horses, because both their food and urinary secretions could be determined accurately. The recent Principal of the Veterinary College in Edinburgh, Professor Dick, states that 12 lbs. of hay and 5 lbs. of oats form sufficient daily food for a horse doing no work, but considers that a working horse should have 14 lbs. hay, 12 lbs. oats, and 2 lbs. beans. The chemical value of the food is as follows:

Horse at rest,	-	29.2	oz. flesh-formers.
Horse at work,	-	56.2	“ “

Difference for work, 27.0 oz. flesh-formers.

The latter amount of albumen contains enough potential energy to raise nearly one and a half million of kilogrammes to the height of a metre, while the work of a horse is generally estimated as eight times greater than that of a man, or would be 850,000 metre kilos. The work which a horse can perform for a short period may be placed at a greater amount than this, but the whole day's labour certainly does not exceed it. We would strongly recommend that experiments in this direction should be multiplied, as they are more likely to give definite results than in the case of human labour. Although we might quote the experiments of Lehmann, Hammond, Beigil, Speck, Franque, and Beneke, in favour of a largely increased secretion of urea, proportionally to increased work, against the experi-

ments of Voit and the younger Draper, in which no large increase was obtained, yet we are of opinion that a sudden augmentation of labour beyond that to which the system is accustomed, is not necessarily attended by a simultaneous manifestation of urea. We believe that the muscular development accommodates itself to the average work required of the body, and that the muscular waste is in proportion to this development. If a man in this condition suddenly increases his labour, as he does by ascending a high mountain, there is no doubt a greater wear and tear of the body, though not in proportion to the work performed, for the system throws itself upon non-nitrogenous fuel for the accomplishment of the unusual work. Unless this were possible, it would be difficult to understand how men could perform unexpected labour without change of diet, and even, for a time, under privation. We admit this as a possibility, or even as a probability, without seeing in this fact the postulate that non-nitrogenous food is the best fitted for muscular work. Whenever a sustained large increase of labour is enforced on the system, we see, as a necessity for its accomplishment, that there must be a greater muscular development, with a steady augmentation of albuminous food and of its products of waste in the secretions. It is quite true, as E. Smith observes, that a sudden increase of work is not always attended by immediate augmentation of urea; but it is equally true that sustained labour, without corporeal deterioration, is invariably accompanied by a corresponding enlargement of the urinary secretions. We find, for example, that a soldier living healthily on 4 oz. of albumen cannot carry on work in the trenches for any lengthened period, if restricted to this diet, although the amount of starch and sugar may be largely augmented. The cab-driver and factory operative remain healthy with a daily ejection of five hundred grains of urea, but the coal-heaver and blacksmith have from six to eight hundred grains, as the representatives of the waste arising from their larger muscular development. It is one thing to admit that non-nitrogenous food may, under certain conditions, have its potential energy converted into muscular force; but it is another thing to contend that this is the normal source of its development. We, on the contrary, believe that the albuminous materials, which alone contain within themselves the means to restore muscular waste, form not only the natural food of muscles but also the ordinary source of muscular power when the body works regularly and without deterioration of its parts. We do not, how-

ever, coincide with Liebig in the opinion that all of this nitrogenous food must first be built into muscle before it is applied in the production of force, for the experiments of Lehmann in Germany, and of Lawes and Gilbert in this country, do not support this belief. And those of Bischof, to which we have previously referred, prove that such food is more readily oxidized than fat, and can be more speedily used as a force-producing fuel.

It may be well, before taking leave of our subject, to recapitulate its main features. Liebig and his supporters contend that albuminous bodies form the natural fuel for the muscular machine, which they consider is alternately wasted and repaired, as a consequence of its work; the contraction of the muscle being due to oxidation, the relaxation to repair of its wasted parts. To this Frankland and his supporters bring in opposition the fact observed by E. Smith and Voit, that suddenly increased muscular effort is not attended by augmented muscular waste. This is an important fact undoubtedly, but it is equally incomprehensible on Frankland's views as on those of Liebig. If the urea be the mere representative of the waste of the animal machine due to friction, why, when that friction is increased, does not the urea increase in proportion? What we do know is this, that the force manifested by the muscles must be the result of a transformation of a motion of molecules into a motion of mass. But we are entirely ignorant of any arrangements in the body by which heat can be transformed into mechanical work; nor does our acquaintance with the mode of working common machines give us the smallest clue to the unwinding of this problem. The only fact upon which Fick, Wislicenus, and Frankland repose their system is, at the least, as inexplicable upon it as it is upon that of Liebig. A theory is certainly defective when it fails to explain an important phenomenon; but it is not science to substitute it by a second theory which also entirely fails to include the very same phenomenon that for the present stands excluded from the first.

In our review of this important subject, we have seen that the questions involved in it are far from having received definite answers. The origin of muscular force is not only one of the most important, but at the same time one of the most difficult, problems in physiology, and many years must elapse before it receives a satisfactory solution. It may be, and probably is true, that amylaceous and saccharine bodies are capable of being used for the development of muscular force; but it may also be true that albumin-

ous materials form the natural fuel for the working of the animal machine, as they certainly do for the construction of the machine itself. The harmony of animal life requires mixed food, and the habits and characters of population must depend upon the manner in which this mixture is habitually achieved. When the inhabitants of a country like Ireland, Norway, Egypt, or Hindustan, neglect the due admixture of nitrogenous and non-nitrogenous aliments, by confining the diet too exclusively to such substances as potatoes or rice, in which the amylaceous bodies predominate, the result is seen in the excessive poverty of the masses and in the idle habits of the people—an idleness which is enforced by physical inability to perform a large amount of work on food of this low quality. The Irish peasant, who can earn only seven or eight shillings a week, when the potato is his chief source of sustenance, can readily, as a bricklayer or navvy, raise his wages to fifteen or twenty shillings, if his food be now adapted to a proper muscular development. Even admitting that the waste of his system is only that of an average man, and not that of a strong workman, it would be necessary for him to eat twelve pounds of potatoes to effect the requisite repairs. Should his stomach refuse to digest more than six pounds, he can only do half a day's work, and is worth only half a day's wage. With such a diet idleness is a physical necessity, not a moral delinquency, for work of an average amount is an impossibility. Now an increase in the quantity of albuminous material, through more nourishing food, places the imperfect labourer in the position of an able-bodied artisan. If, in a protracted campaign of the same number of Russian and English soldiers, equally trained and led, the English soldier is kept on his peace diet of four ounces albumen, and the Russian receives his war ration of six ounces, the chances are as six to four that the Russian will ultimately win; for any superiority, moral, hereditary, or national, of the English soldier will vanish in the fact that the physical machine of his body must run down without adequate repair. All this is independent of theory. The experience of mankind, as well as science, makes it quite certain that the animal body can only be repaired by albuminous materials, of which a certain quantity, proportionate to the work performed, must be presented. They may be the direct or indirect source of the labour performed, but they must unquestionably be present in food, and any deviation from the quantities required by the body to repair its waste will quickly show itself in the deterioration of the human frame; for nature pur-

sues her own course, and must have her laws strictly obeyed, however imperfectly existing theories may interpret them to the world.

ART. III.—1. *The Present State of the Church of Ireland.* By RICHARD WOODWARD, Bishop of Cloyne. Dublin, 1787.

2. *The Church Establishment in Ireland, Past and Present. Illustrated exclusively by Protestant authorities.* Dublin, 1863.

3. *A Charge addressed to the Clergy of Armagh and Clogher.* By MARCUS-GERVAIS, Archbishop of Armagh. Dublin, 1865.

4. *Substance of the Speech made by EARL GREY in the House of Lords, on Friday, 18th March 1866, in moving for a Committee to consider the State of Ireland.* London, 1866.

5. *The Irish Church Establishment.* Speech of Sir JOHN GRAY, delivered in the House of Commons, 11th April 1866. Dublin, 1866.

6. *The Case of the Irish Church Establishment in Ireland, considered in a Charge to the Clergy of Killaloe, etc.* By WILLIAM FITZGERALD, D.D., Bishop of Killaloe. Dublin, 1866.

7. *A Charge, etc.* By HAMILTON VERSCHOYLE, D.D., Bishop of Kilmore. Dublin, 1866.

8. *A Charge, etc.* By WILLIAM HIGGIN, D.D., Bishop of Derry and Raphoe. Dublin, 1866.

BETWEEN the Irish people and the Anglo-Irish Church a long war has been waged; a war which has lasted ever since the English invasion until the present hour. In that theatre of hostilities where a Christian Church can with perfect propriety strive for mastery, the Anglo-Irish Church has sustained discomfiture, for it has won no triumphs on that glorious battle-ground where the hearts of a nation form the trophy. The Irish people still defy the Church of their invaders, and reject the hierarchy into whose ranks in ancient times Irishmen were, by insulting Statutes, forbidden to enter. Indeed, it can scarcely be pretended that the Anglo-Irish Establishment ever felt the true spirit of a Church militant towards the mere Irish, nor was it devoted to the spiritual work of winning souls. As 'Church patronage was one of the most readily available' amongst 'the means of corruption' (to use the language of the Bishop of Killaloe), the bishops were mostly political tools chosen by the

English Government for the purpose of extending its power. The true weapons of a Church—the saintly men living saint-like lives, the burning words spoken in a language 'understood of the people,' the sacred offices sacredly administered,—these implements of evangelistic warfare were rarely employed for the benefit of Irishmen. But the Anglo-Irish Church was from the very first successful by means of less worthy weapons, in a field less noble than that of missionary enterprise, and in the arena of political strife gained many victories over the Irish people. Its first triumph was over the independence of Ireland, which was battered away for an ecclesiastical establishment. By English aid the Anglo-Irish Church was sustained for more than 300 years, during which, although no doctrinal differences existed, the hierarchy and the nation were to a considerable degree estranged from each other. And when the Anglo-Irish bishops, at the period of the English Reformation, attorned for their temporalities to Henry VIII. instead of the Pope—and thus unwittingly took a step which in subsequent years was employed as a means for justifying the introduction of a Reformed Episcopate and a second Church, which the Irish clergy and people rejected—then the Anglo-Irish Reformation Church, although that of the very small minority of the people, was enabled, by means of English arms and laws, to obtain triumphant possession of all the ancient national endowments for religion in Ireland which had not been confiscated into lay hands. In point of fact, the Reformed Church in Ireland had no beginning except in the Council Chamber of Elizabeth. It was born and cradled amid despotism and corruption. The Queen commanded her deputy, Sussex, to establish the Reformed religion by Act of Parliament, and Sussex abandoned the Mass, took up the new creed as if it were a new glove, packed a fictitious Parliament, and passed a batch of laws which were thrust, wherever and whenever the English Government had power, down the throats of the Irish. To give their Episcopate a somewhat better pedigree, Irish Church historians have fondly invented a legend, to the effect that the Roman Catholic prelates, who were in office at Queen Mary's death, were, upon Elizabeth's accession, converted by compulsory oaths of supremacy and penal Acts of Parliament to the Reformed faith. But there is no evidence that any of those bishops conformed, with the single exception of Hugh Curwin, the Archbishop of Dublin, who alone of the Irish bishops appears as the advocate of the Reformation, and the Queen's instrument for creat-

ing a Reformed hierarchy. Curwin and the Queen, however, had only power to interfere with the temporalities of the Irish sees, and that only in those parts of Ireland where the English Government was strong. The Pope and the Irish papal bishops had, and still have, exclusive power over the spiritualities, which neither sword nor persecution were able to destroy.

In spite, however, of the dubious morality of those early transactions, the present legal right of the Anglo-Irish Church to the ecclesiastical property of the nation is of course perfect, and would be so even if that Church could not reckon a hundred members. That property consists chiefly of tithes, the compulsory payment of which was introduced into Ireland in 1172 by Henry II., in opposition to the feelings of the inhabitants,—the Celtic mind being, it is said, averse to all except voluntary payments for religion. Queen Elizabeth and her successors, by various legislative enactments, secured the Church revenues to the present possessors, whose legal and parliamentary title is indisputable. There is accordingly no necessity to determine, in relation to the question of tithes, whether the present Established Church or the Roman Catholic be the true successor of the pre-Reformation Anglo-Irish Church. The one can boast of legal, although somewhat irregular, bishops, of royal and parliamentary sanction, and of the possession of all the churches and of all the ecclesiastical power and property which the State could give it. The other Church can adduce papal bishops, the authority of the Irish chieftains, continuity of doctrine and complete spiritual jurisdiction over the great bulk of the inhabitants. To rights, however, which are merely legal, and have no foundation in eternal justice, Kings, Statutes, and Parliaments can give only present and temporary, not permanent and immutable force. And rights, which originated confessedly in a traitorous compact, which were enforced by despotic power, and have been preserved only by penal legislation, are, from their very nature, peculiarly liable to change. The legal rights of the Anglo-Irish Church to the ecclesiastical property of Ireland have, accordingly, been oftentimes altered and modified, and have even undergone, both anciently and recently, partial confiscations. The destruction of monasteries, and the secularization of their revenues, the discontinuance of 'book-money'—an oppressive exaction formerly\* levied on Ro-

man Catholics, the abolition of agistment tithe, the removal of vestry cess and ministers' money, the suppression of bishoprics and benefices under the Church Temporalities Act,—these are all undoubted instances of rights once perfectly legal and statutory, but now withdrawn from parliamentary protection, and reduced to nullity as far as law is concerned.

The successive modifications to which in modern times Church property in Ireland has been subjected, although stigmatized, when enacted, as unjust, sacrilegious, and blasphemous, have notwithstanding been accompanied by a singular improvement in religion, whether Protestant or Roman Catholic. The Anglican 'Churches,' observed Primate Beresford (at page 22 of his 'Charge to the Clergy,' 1864), 'have well-nigh trebled in number within the last century, and are yearly multiplying. The ministers of the Church have increased in like proportion. Above all, spiritual life has grown and has been strengthened within her.' The Roman Catholic places of worship, on the other hand, which formerly were mean cabins or huts without cross or belfrey, and lay in glens or obscure localities, have been replaced, since the pressure of penal legislation was removed, by massive edifices, cross-crowned and flanked by seminaries, or convents, or clergy-houses. The good which the Roman Catholic Church (to use the words of Dean Byrne) has done in 'strengthening the fabric of society, by enforcing the obligations of moral duty,' is proved by the increased temperance, sobriety, and morality of the Irish. 'The male por-

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tant ministers for their fees. In a Roman Catholic Register-Book of Marriages (now before us) for a parish in the county Westmeath, there are frequent proofs of this practice. In this register, which begins in 1737 and ends in 1775, there appears a regular account between the parson and the priest. Such entries as the following are common:—'*N.B.*—He paid 3s. 9d. for ye parson's fee.' 'I received Mr. Champheney's (the Vicar's) fees.' 'Cleared out with M'Geunis' (the Vicar's clerk). 'He swore by y<sup>e</sup> book oath y<sup>t</sup> he w<sup>d</sup> pay Mr. M'Geunis.' Sometimes the clerk's wife was present, in lieu of her husband, at the Roman Catholic marriages, and then it is entered, 'Mr. M'Geunis' wife came with them,' or she 'became security for ye parson's fees.' The parson's clerk duly entered his receipt for these fees at regular intervals. In 1774 the parson's agent seems to have been a Mr. Ross, for the last entry in that year is as follows:—'13 July 1774, agreed with Mr. Ross to pay £2, 5s. 5p. p. year for marriage dues—paid Mrs. Ross's order, 20 Oct. 1774, 11s. 4½., and 13 Jan. 1775, 11s. 4½d.' The many vexatious and irritating annoyances, like the foregoing, to which Roman Catholics in Ireland were exposed, would not have been endured a day, unless the armed power of England had been at hand to enforce subjection

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\* The Roman Catholic priests, down to a late period, were obliged to compound with the Protes-

tion of them,' said Lord Morpeth in 1841, 'exhibit at the present moment more sobriety, and the female portion more chastity, and both show more power of endurance under calamity the most trying and aggravating, than could be attributed to the inhabitants of either of the sister countries.' There seems therefore no just cause why proposals for further modifications of Irish Church property should not be entertained in a candid and rational spirit by all who are anxious for 'the extension of the means of religious instruction and consolation to the whole people.'

Nor is there anything in the mode in which the present contest about Irish Church property is conducted, which need irritate the friends of religion in general. Sir John Gray, who is a Protestant, leads an attack upon the Temporalities, not the Church—upon endowments, not doctrine. As member for Kilkenny, he seems somewhat appropriately selected for the purpose. That borough contains 1401 Anglicans, 171 Dissenters, and 16,141 Roman Catholics. Three churches in Kilkenny city afford ample church accommodation for the members of the Established Church in that locality, even if all of them, aged over five years, should choose to attend divine worship at the same time. There is a bishop whose net income is £3867, 9s. 6d., and a dean, precentor, chancellor, treasurer, archdeacon, and six prebendaries, whose united revenues amount to £6971, 4s. 5d. The entire diocese of Ossory, to which Kilkenny belongs, contains 8258 Anglicans, 580 Dissenters, and 131,248 Roman Catholics. The value of the benefices (exclusively of the bishopric and of glebe-houses, etc.) is £21,050, 19s. 6d. For the spiritual advantage, accordingly, of each Anglican in Ossory, the State has provided a sum averaging £2, 10s. 10d. per head, without reckoning other sums paid to chaplains of prisons, asylums and work-houses. The Roman Catholics, who of course do not receive one farthing of the ancient endowments of their religion, have the bitter consciousness that their own Roman Catholic ancestors founded, in 1178, the very cathedral in which the Anglican bishop has his throne. That bishop, moreover, is one whose views are little calculated to soften the asperity of such bitter recollections. He and his clergy have steadily refused to administer the national funds voted for education, and thus have separated themselves from almost all intercourse with Roman Catholics. Kilkenny borough has, besides, a special grievance of its own. When St. Canice or Irishtown, part of Kilkenny city, was disfranchised at the Union,

the State gave £15,000 compensation, which sum was allocated, not to general purposes nor for the benefit of all creeds, but to the Ecclesiastical Board of First Fruits, in order to swell the funds applicable to the erection of churches and glebe-houses for members of the Established Church!

Sir John Gray, it must be confessed, has done his 'spiriting' with a gentleness positively surprising in the representative of a borough inheriting such traditions. His motion was simply 'that the position of the Established Church in Ireland is a just cause of dissatisfaction to the people of that country, and urgently demands the consideration of Parliament.' If 'the people of that country' consists of the 5,105,610 inhabitants who are not members of the Established Church, then the first part of Sir John's motion is a truism, for it is utterly impossible to term 698,357 Anglicans (who form less than twelve per cent. of the entire population) 'the people of that country.' The remaining part of Sir John's motion is also a truism, if the deliberate opinions of Ministers of State, expressed during the last forty years, are of any weight. Perhaps it may be useful to call to remembrance a few of those observations. The Marquess of Anglesea was in 1828 appointed Lord Lieutenant of Ireland by the Duke of Wellington, and subsequently served the same office under Earl Grey, with Lord Plunket as his Chancellor, and Mr. Stanley, now Earl of Derby, as his Chief Secretary. Lord Anglesea thus expressed himself in a letter quoted by Mr. Ward in the House of Commons in 1835:—'The Establishment, which at all times far exceeded the wants of the Protestant congregations, has hitherto been upheld by the State, mainly on the ground that it served the temporal use of consolidating the connexion between the two countries. But this service it no longer performs. Instead of strengthening the connexion, it weakens it.' \* Earl Fortescue, Lord-Lieutenant under Lord Melbourne's administration, from 1839 to 1841, declared in 1841, 'that it was most essential to the peace and contentment of Ireland that some legislative and established provision should be made for the Roman Catholic religion,' and could not find any means by which such a provision could be made, 'so much in conformity with the ordinary rules of justice

\* This, and other quotations which follow it, have been taken from a small but useful book, compiled, it is believed, by Mr. Aubrey De Vere, entitled *The Church Establishment in Ireland, Past and Present. Illustrated exclusively by Protestant Authorities, etc.* Dublin: G. P. Warren. 1863.



and common sense, as the appropriation to its use of a part of those funds which had been originally given for the religions of all denominations.' The Earl of Carlisle, Lord-Lieutenant under Lord Palmerston for nine years, and previously Chief Secretary in Ireland, for six years, said, 'The only intelligible ground on which an established religion could rest, was on its being the opinion of the majority—the opinion of the majority exceeding in number those who profess any other faith.' The chief governors of Ireland who used this language were, it must be remembered, members of the Established Church, and patrons of church-livings both in their private and public capacities. Three Chancellors of England, Brougham, Truro, and Campbell, spoke, more strongly than the three Lords-Lieutenant just quoted, on the same theme. Brougham regarded 'the grand abuse of the Irish Established Church' as 'the master evil' and 'the source of perennial discord.' Lord Truro said 'the Irish Church was at the bottom of all the unhappiness which Ireland suffered.' Lord Campbell (Chancellor of England under Lord Palmerston) 'believed the Protestant Church in Ireland to be one of the most mischievous institutions in existence.' Earl Grey, a Cabinet Minister from 1846 to 1852, asserted that 'it was not in human nature that the Irish people should feel otherwise than indignant that a large endowment, originally granted for the purposes of the Catholic religion, should be taken away and applied exclusively to the religious instruction of a small fraction, and that the richer fraction of the people.' He also believed 'the Church of Ireland to be the main source of all that misgovernment and oppression under which the Irish for nearly three centuries have suffered.' Sir George Grey, Home Secretary from 1846 to 1852, was of opinion that a complete union between England and Ireland 'never could be effected so long as an established and endowed Church of the minority exclusively existed.' And Lord Lytton, who served in Lord Derby's Cabinet as Colonial Secretary, considered the words 'Irish Church' to be 'the greatest bull in the language.' 'It was called the Irish Church because it was a Church not for the Irish.' 'The Protestant Establishment . . . stood upon the gigantic ruins of the Catholic Church property.' 'The Church in Ireland costs as much for the police and soldiers as for the clergy themselves.' 'Do we,' asked he, 'imitate the Saviour or the Impostor, when we carry the Bible in one hand and the sword in the other?'

Earl Granville, appointed President of

the Council under Lord Palmerston in 1859, was of opinion that 'the principle on which the Irish Church was established was erroneous.' Mr. Milner Gibson, President of the Board of Trade under the same Premier, thought that 'so long as the Establishment remains in Ireland, 'it must be looked on by the bulk of the population as a badge of conquest and degradation.' Lord Palmerston himself held 'that the revenues of the Church of Ireland were primarily destined for the religious instruction of the people;' and Earl Russell, the successor of Lord Palmerston in the premiership, believed that so long as the condition of the Irish Church is 'territorial, the contentment of the people never will exist.' This *catena* of Protestant authorities upon the Irish question, consisting of Lords-Lieutenant of Ireland, Chancellors of England, Secretaries of State, and Prime Ministers, may be fitly closed by the testimony of two Chief Secretaries for Ireland. One, Lord Hatherton (formerly Mr. Littleton), said 'the nature of the Established Church in Ireland was an anomaly without a parallel in the history of the world.' The other, Mr. Chichester Fortescue, in the recent debate on Sir John Gray's motion, declared that he 'felt dissatisfied as a Protestant, even more than Roman Catholics could have felt dissatisfied, with the position of things to which the first part of that resolution referred,' and also said 'that a just and permanent settlement' of the question would 'be one that would most contribute to the social, political, and religious interests of the country.'

The mere mention of the names of the eminent statesmen whose sentiments have been just quoted, ought to be sufficient proof that they did not regard the overthrow of the United Church, either in England or Ireland, to be a necessary consequence of the removal of Irish Church Temporalities. It is pretty evident that they distinguished between the Church and the Establishment, and believed the latter to be a hindrance to religion, and an injury to the State.

As, however, it has been frequently asserted, by some who are looked on as representatives of the Anglo-Irish clergy, that the Church itself, both in England and Ireland, is in danger of destruction if Irish Church revenues are interfered with, it may be useful to review some of the principal statements which in past and present times have been published in defence of the Establishment. In 1786, Dr. Duigenan, a lay Fellow of Dublin University, and who represented the borough of Armagh in the last Irish Parliament issued, under the signature of 'Theophilus,' 'An Address to the Nobility

and Gentry of the Church in Ireland as by Law Established,' and argued that 'the abolition or reduction of tithes' was equivalent to 'a translation of property from the clergy of the Established Church to Popish ecclesiastics;' and that the payment of tithe in the manner 'it was then payable by law, was the properest mode of raising a maintenance for the clergy.' He subsequently published, in 1798, in his own name, 'An Answer to H. Grattan,' in which he called Edmund Burke 'the apostle of Popery,' and asserted that 'the public taxes were chiefly paid by the Irish Protestants.' He also said that 'of the mass of real and personal property' of Ireland, 'nineteen out of twenty parts were in the hands of Protestants,' and that 'the whole Church revenues equally divided among the clergy, would not produce to each £150 per annum.' About the same period Bishop Woodward of Cloyne stood forward as a champion of the Temporalities, and wrote, in 1787, a pamphlet, entitled 'The present State of the Church in Ireland,' of which four editions were published within twelve days, and nine within a few months of its first issue. In this work the bishop represented 'the Protestant interest' as in danger, and warned 'the Protestant proprietor of land that the security of his title depended very much, if not entirely, on the Protestant ascendancy.' He then improved the 'poverty plea,' calculated the net income of parishes in fourteen dioceses, deducted the cost of collection, and five per cent. for insolvencies (an item unaccountably omitted by modern valuers,) and reduced the average net income of each clergyman to the sum of £133, 6s. per annum, 'a sum less,' as his Lordship declared, 'than what a minister in Scotland gets on a average,' or than the average pay of a Government chaplain, which was then '£114 and lodgings, with liberty to take clerical duty when not in garrison or actual service!' So convinced was this worthy bishop of the low value of livings, that he felt constrained to give his own son, and that within three years of his taking holy orders, three or four of those preferments which appeared to his Lordship so miserable, which, however, in the present day, notwithstanding the depreciation which Church property has, it is said, suffered since Woodward's time, are worth more than a thousand pounds a year! Bishop Woodward did not forget to mention that in England there was one clergyman to every five square miles, but in Ireland only one to every twenty-three square miles. He thus predicted the dreadful effects of any diminution of the temporalities:—'Any reduction of the incomes of the parochial

clergy must be highly injurious, a considerable one fatal, to the Protestant Established Church. It must, in the first place, perpetuate large unions, it must render small parishes incompetent to support a resident minister: of course put a stop to the building of glebe-houses, and not only prevent the erection of new churches, but shut up a considerable number of the old ones. The number of the Protestant clergymen must in the same degree be diminished.' It is consoling to remember that these doleful predictions not only have not been fulfilled, but have been actually falsified by events. According to the present Irish Primate, the number of churches and clergymen has been trebled since 1787. But Bishop Warburton, who held the see of Limerick from 1806 to 1820, has probably left the best exposition on record of that defence of the Temporalities which consists in 'the multiplication of churches and resident clergy.' In a letter,\* dated in 1810, he details the improvement then taking place in the Irish branch of the United Church. 'Parliament' (he observes) 'now wisely grants £50,000 per annum for the purposes of building churches and glebe-houses, and for purchasing glebes, so that during the last seven years more has been done in that way than in a century before that period.' 'I have been employed,' continues his Lordship, 'for some weeks past in Kerry, inspecting and constructing some new churches in the most distant and wildest parts along the coast from Kenmare to Dingle. They had never seen a bishop there before, and in some parishes, I am sorry to say, they had never seen a Protestant minister! I have now given them churches and resident clergy, which must have the best consequences, both religious and political. With respect to Ardfert Cathedral, it was originally a very extensive and magnificent building—totally ruined in the wars of Cromwell; part of it is now fitted up neatly, which serves also for the parish church. The Chapter is complete; I have just revised and rendered it efficient. It consists of a Dean, Archdeacon, Precentor, Chancellor, Treasurer, and Archdeacon of Aghadoc. There is a Minor Canon—all endowed.' When Bishop Warburton speaks of 'giving' churches and clergy, it suggests the recollection of another Irishman who 'out of his great bounty built a bridge at the expense of the county,' for that prelate †

\* See Wakefield's *Account of Ireland, Statistical and Political*, vol. ii. p. 468. London, 1812.

† Warburton was remarkable, even in a most corrupt period, for the way in which he disposed of his church preferments in order to enrich his family.

was not famous for giving such things, unless in the way of giving churches to his sons, and clergymen to his daughters. Those parishes, moreover, in Ardfert diocese, which lie on the coast between Kenmare and Dingle, do not seem to have been benefited much by the exertions of his Lordship. They are eighteen in number, and in 1810 were comprised within twelve benefices, of which two had no churches either then or afterwards, and were therefore suspended. Two other benefices remained without churches during Warburton's episcopate. The churches of the remaining eight benefices were indeed built or repaired under Warburton, but at the time when he wrote only one had been erected. Of those twelve livings, now reduced by suspension to ten, five have been held since Warburton's time by absentee incumbents, or incumbents whose absence would have been more advantageous than their presence. The 'neatly fitted up' cathedral at Ardfert is still a ruin, and the seven functionaries, forming the Chapter which the bishop 'revised and rendered efficient,' have had no duties to perform, nor a cathedral in which to perform them, if they had any; the office of even the Minor Canon being returned to Parliament as 'a complete sinecure.' Just half a century since Warburton's time, the present occupant of the same See of Limerick, Ardfert, and Aghadoe, uses somewhat similar language regarding a part of that diocese not far from the scene of Bishop Warburton's liberality. In October 1866, Bishop Graves, when consecrating some churches in Kerry, described his labour as 'the consummation of several acts which had brought a great change over the circumstances of this district. Half a century ago, in the lifetime of many now (observed the bishop) listening to him, in this western district of Corkaguiny, there was not a single church nor one congrega-

tion of persons professing the Reformed Faith. What a sad state of darkness was this!' exclaimed the bishop, who went on to denounce the 'superstition and priestcraft' under which the people 'groaned.' But, on referring to the Census Returns and the Reports of the Commissioners of Ecclesiastical Revenue, it appears that there were three churches fifty years ago in that locality, the dates of whose erection were respectively 1808, 1810, and 1816, while there is reason to suppose that other churches, more anciently built, were still standing. The 'great change' which the bishop supposes to have come over that district seems to consist in a very small increase in the Anglican population, which may be accounted for by other causes than the reformation of the inhabitants. Anyhow, the Church-population of the fourteen or fifteen parishes in Corkaguiny barony was, in 1830, a little over 700 souls, who had then five churches, with accommodation for over 800 worshippers. In 1864, in the same parishes, the Church-population amounted to more than 800 souls, who now have eight places of worship affording accommodation for 1200 persons. The State Church, which thus amply has provided for the spiritual wants of the Anglican minority, has left without spiritual aid no less than 21,063 persons who form the Roman Catholic population of Corkaguiny barony. In 1835, when plans of Church reform were supposed to engage the attention of legislators, the discovery began to be published that 'the Church in Ireland was not originally Roman Catholic, and that Henry II. and the arms of England compelled the Irish' to accept Romanism. So it was stated in a pamphlet bearing the imprint of 'Rivingtons: London, 1835,' and entitled *The Irish Church—Important Facts*. In the same year the 'missionary-civilisation,' otherwise called the 'resident-gentry,' theory was forcibly put before the House of Lords by Bloomfield, Bishop of London, who, quoting the words of Bishop Jebb of Limerick, described Irish clergymen as 'missionaries of civilisation,' and as 'absolutely creating manufacture' by their activity. They go, said the bishop, 'through bogs, across mountains, over miles of scarcely accessible country.' 'They exert themselves to encourage the cultivation of flax; to superintend the manufacture of wheels; to distribute with their own hands the implements so manufactured; to pay domiciliary visits for the purpose of observing and ascertaining the progress of industry.' Flax was fortunate in exciting so much episcopal and clerical enthusiasm, and Bishop Stopford of Cork, who bequeathed

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The personal history of this bishop is curious. His real name was not Warburton, but Mongan, and it is not known for certain how or when he was ordained. The tradition is that he was apprenticed to some trade, but, through misconduct, failed to satisfy his master. He then, so the story goes, was inspired with a sudden zeal for Foreign Missions, and received, or said he received, holy orders in London, for the purpose of converting the heathen. He next took passage in a troop-ship bound for Canada, ingratiated himself with the officers, and became chaplain to the troops. He gained the friendship of a nobleman high in command—first by his agreeable qualities as a table-companion, and afterwards by lending him a large sum of money upon slight security. These favours that nobleman afterwards repaid by giving Warburton church preferments, which led eventually to a bishopric.

100 spinning-wheels to 100 poor women, 'to be distributed by the Dean and his curate,' was no doubt highly to be commended. But yet there are clergymen and laymen also who cannot but feel this clerical devotion to spinning-wheels to be somewhat discordant from the tenor of the Ordination Service.

Most of the above statements in defence of the Temporalities have been repeated with variations and additions in a compilation recently published by the Church Institution, under the imposing title of *Facts*. Perhaps the most remarkable of the newly coloured 'facts' are those about the Protestantism of St. Patrick, the identity of the present Anglo-Irish Church with that of St. Patrick in 'doctrine, discipline, and worship,' and the assertion that the 'regular and ancient succession of bishops from St. Patrick has descended continually in the Church in Ireland to the present day.' The Protestantism of Patrick, and the identity of the present Reformed Church with that founded by St. Patrick, which, according to Dr. Todd, had no diocesan episcopacy until the twelfth century, are matters upon which a great deal might be said, in opposition to the flippant assertions of eloquent and zealous speakers at Church Congresses. The episcopal succession from Patrick to Primate Beresford, can hardly be considered as proved, unless those imagined links are discovered, which may connect in unbroken continuity the bishops of London, or the Scotch prelates, with the ancient see of Armagh. The present Anglican bishop in Ireland are the ecclesiastical descendant of those eight bishops whom Charles II. at the Restoration in 1660 found in Ireland. The ecclesiastical pedigree of those eight prelates must, according to the hitherto published records\* of their consecrations, be traced to John Leslie, Bishop of the Isles in Scotland; John Maxwell, Bishop of Ross, also in Scotland; and to Edmund Bonner, Bishop of London. Thus, instead of St. Patrick and his successors, one English and two Scotch prelates are the episcopal forefathers† of the Anglo-Irish Church.

A much more important branch of this question is that which relates to the actual state of the Irish Establishment at present.

\* See Cotton's *Fasti Ecclesiæ Hibernicæ*, vo. iv. Appendix, pp. iii.-xxix. ed. 1850.

† See 'The alleged Conversion of the Irish Bishops to the Reformed Religion at the Accession of Queen Elizabeth, and the assumed Descent of the present Established Hierarchy in Ireland from the ancient Irish Church, Disproved. By W. Maziere Brady, D. D.' Fourth edition enlarged. London: Longmans, 1866.

The population of Ireland consists of 4,505,265 Roman Catholics, 693,357 members of the Established Church, or Anglicans, and 600,345 members of all other persuasions, who are chiefly Presbyterians, and may be called 'Dissenters.' There are 2428 parishes in Ireland, of which 199 contain no Anglican inhabitant, and 575 contain an Anglican population in no case exceeding twenty souls. Thus in very nearly one-third of all the parishes in Ireland, the parochial system, as far as members of the Established Church is concerned, is almost a myth. To disguise, as much as possible, this lamentable failure, various shifts have been resorted to. The very name of 'parish' has been declared inapplicable to 918 of those ancient parishes, and their proper appellation has been pronounced to be 'denomination.' They have been added to other parishes, and their distinct individuality has been taken away on their entrance into the compound of parishes called a Union, somewhat in the same manner as penal convicts forfeit their Christian names and surnames, and receive a numeral for their designation on entering Dartmoor or Pentonville. Some of these parishes have been also compared with thinly peopled parishes in England, as if their Roman Catholic inhabitants were no more worthy of being counted in the population than mere kites or crows. They have been termed 'insignificant,' and likened unto little parishes "only forty yards square.' Yet, in truth, those 199 parishes which have no Anglicans at all, contain 98,017 Roman Catholics, and possess an average population, for each parish, which amounts to 492 Roman Catholic souls, a higher average than that of the Anglican benefices in Ireland. And those 575 parishes, not one of which contains more than twenty Anglicans, have an average population of more than 1000 Roman Catholics per parish. Nor will the Establishment appear to much better advantage in its diocesan divisions. In none of the thirty-two Irish dioceses are the Anglicans equal to the Roman Catholics, while in four dioceses the Presbyterians outnumber the Anglicans.\* In no less than twenty dioceses, the Anglicans average only five per cent. to the total population, forming an average population of 6949 Anglicans and 879 Dissenters per diocese. Yet (as the following table will show), there is an average of 131,150 Roman Catholics to each of these twenty dioceses, which include very nearly one-half of all the inhabitants of Ireland.

\* See the Census of Ireland, 1861. Part iv. p. 29.

DIOCESES.	Proportion per cent. of Anglicans to the Population of each Diocese in 1861.	POPULATION.			Number of Benefices in each Diocese.	Value of Livings to each Diocese.
		Anglicans.	Dissenters.	Roman Catholics.		
1. Kilfenora, .	1.1	251	2	22,789	4	£1,660 19 11
2. Kilmaednagh, .	1.8	434	31	24,333	4	1,961 0 8
3. Emly, .	2.3	1,414	75	60,707	17	6,513 4 11
4. Ardfer, .	2.9	6,424	487	215,028	44	12,425 1 1
5. Tuam, .	2.9	9,041	1,553	302,367	47	14,191 8 6
6. Achonry, .	3.1	3,392	275	105,203	12	3,598 16 7
7. Lismore, .	3.3	4,775	721	139,769	48	11,638 17 5
8. Cashel, .	3.9	4,721	459	114,881	37	16,419 12 7
9. Clonfert, .	3.9	2,521	439	61,183	14	3,964 11 8
10. Limerick, .	5.0	8,679	1,619	162,324	49	15,120 14 3
11. Elphin, .	5.2	10,506	1,865	189,508	38	8,237 12 3
12. Killala, .	5.4	4,724	1,014	81,337	14	4,699 17 2
13. Cloyne, .	5.5	11,746	1,126	202,294	80	30,708 11 6
14. Killaloe, .	5.6	12,700	1,298	211,098	63	16,817 5 4
15. Ossory, .	5.9	8,258	580	131,248	54	21,050 19 6
16. Meath, .	6.4	16,289	1,929	235,136	105	30,717 11 11
17. Ross, .	6.8	4,746	617	64,540	27	7,090 3 8
18. Waterford, .	6.8	2,943	1,091	30,472	9	3,271 18 1
19. Ardagh, .	8.1	11,044	1,069	124,185	30	12,042 3 1
20. Ferns, .	9.5	14,383	1,335	135,650	61	20,193 12 0
TOTALS, .	...	138,991	17,585	2,623,002	752	£242,324 2 11
Averages per Diocese	4.7	6,949	879	131,150	...	£12,116 2 6
Do. per Benefice	...	184	23	3,488	...	£322 4 9

It will surprise no one, who remembers how parishes were turned into benefices, to learn that the thirty-Irish dioceses have been reduced, so far as bishops are concerned, to twelve. Each of the present bishops presides over two or more dioceses, with the exception of the Bishop of Meath, who has but one. Their episcopal functions are exercised in superintending, on an average to each bishop 125 benefices and 181 clergymen. Their emolument, which is about £36 per benefice, averages to each prelate £4592 of net income, exclusively of the value of their palaces.

The Irish benefices have been returned by the Ecclesiastical Commissioners as 1510 in number. Looking at these benefices in the mass, it appears that one-half of them, or precisely 752, form twenty dioceses, and contain 184 Anglicans, 23 Dissenters, and 3488 Roman Catholics per benefice. The average gross income of these 752 incumbents is £322 yearly, but the cost of clerk, sexton, and requisites for divine service, is, at least, £16 additional per benefice. If the cost of episcopal supervision be added, the expenditure of ecclesiastical funds will be found to average more than £2 per head throughout one-half of the Irish benefices.

Among the 1510 benefices, however, are reckoned certain perpetual cures, not, prop-

erly speaking, parochial benefices; but chiefly district curacies or chapelries, whose incumbents are admitted by simple nomination of the patrons, without cure of souls in the old legal sense, and scarcely differing, save in permanency of tenure, from assistant curates. Deducting 118 of these perpetual curacies (whose average gross value is but a hundred guineas each) from the total of 1510, there remain 1292 benefices, of which number 677 contain, in every instance, more than 200 Anglicans apiece. The total Anglican population of these 677 livings, calculating on the basis of the revised summary of the census of 1861, amounts to 630,845 persons, or, on an average, to 932 Anglicans per benefice. The incumbents, however, of these larger benefices are, to a great extent, relieved of their duties by the 218 perpetual curates just mentioned, and 464 assistant curates who were employed in those benefices in 1864. The incumbents, perpetual and assistant curates, amount together to the number of 1359 ministers, who have, respectively, the spiritual care of 464 parishioners, a number not considered by Archbishop Whately too great for each clergyman. It must also be recollected that there are many places of worship, provided by extra-parochial zeal, which tend to lessen considerably the labour of the parish minis-

ters, in these larger benefices. Deducting the gross income of the 218 perpetual cures, and the stipends of the 464 curates-assistant as stated in Staepoole's return, there will remain an average income of more than £300 yearly of every one of these 677 incumbents, exclusively of the value of glebe-houses, and without reckoning the various stipends paid to these incumbents for ministering to their own parishioners in prisons, asylums, work-houses, and gaols.

If the Anglo-Irish Church possessed merely these 677 larger benefices just noticed, and if St. Patrick, in his zealous Protestantism, has totally exterminated Roman Catholics and Dissenters, as well as venomous reptiles from Ireland, there would remain, notwithstanding, much room for improvement in these livings by re-distribution and better apportionment, than at present exists, of income to work. Some of the incumbents of these livings are so poor as to be quite unable to maintain themselves on their church income in a position of respectability, or to keep a sufficient number of curates to minister to the spiritual wants of their parishioners. In such benefices there is oftentimes little disposition on the part of the Anglican inhabitants to supplement by local subscriptions the deficiencies of the State endowment. It seems as if the State system, instead of stimulating, actually repressed private contributions for the advancement of the reformed religion, and threw a cold blighting shade over all voluntary efforts for the 'spiritual aid' of the Establishment. But there is another class of benefices to which public attention is far more strongly invited, and which forms an anomaly which would seem to most persons utterly indefensible on any grounds of policy or righteousness. When the 219 perpetual cures and the 677 larger livings have been deducted from the total of 1510 benefices, there will remain 615 smaller livings, in not one of which does the Anglican population exceed 200 souls. The distribution of these benefices over the several dioceses of Ireland will appear from the following table.

It is evident that, according to the following figures, a good many of the incumbents of those 615 parochial benefices must have comparative sinecures. But on examining those parishes one by one, by the aid of the census and other returns, the state of the Anglican or Established Church will appear somewhat extraordinary. Those 615 benefices contain a population of 47,628 Anglicans, 19,745 Dissenters, and 1,389,148 Roman Catholics. In other words, these 615 livings have an average population of 77 Anglicans, 32 Dissenters, and

BENEFICES WHOSE ANGLICAN POPULATION IS

	20 and under.	Over 20 and not over 30.	Over 30 and not over 40.	Over 40 and not over 50.	Over 50 and not over 100.	Over 100 and not over 150.	Over 150 and not over 200.	TOTALS.
Armagh, . . .	5	..	3	..	8	3	3	22
Clogher, . . .	..	..	..	..	2	..	..	2
Meath, . . .	7	2	6	5	18	17	7	62
Derry, . . .	..	..	..	..	2	2	1	5
Raphoe, . . .	..	..	..	..	..	1	4	5
Down, . . .	..	1	..	..	3	1	4	9
Connor, . . .	..	..	..	..	1	3	2	6
Kilmore, . . .	..	..	..	..	..	1	..	1
Elphin, . . .	3	1	4	..	5	6	2	21
Arlagh, . . .	..	..	..	1	2	4	4	11
Tuan, . . .	3	2	1	2	11	3	3	25
Killala, . . .	..	..	..	..	..	2	1	3
Achoory, . . .	..	..	2	1	2	..	1	6
Dublin, . . .	2	4	2	1	9	6	4	28
Kildare, . . .	2	2	..	4	6	5	1	20
Ossory, . . .	6	8	3	2	10	8	4	41
Ferns, . . .	..	2	..	1	13	6	4	26
Leighlin, . . .	6	..	3	1	11	5	3	29
Cashel, . . .	3	1	2	5	5	5	3	24
Emly, . . .	5	1	2	1	4	2	1	16
Waterford, . . .	2	..	..	..	1	3	..	6
Lismore, . . .	9	4	2	6	7	..	2	30
Limerick, . . .	6	4	4	3	7	5	3	32
Ardferri and Agaboe, . . .	2	2	4	2	15	4	3	32
Cork, . . .	3	3	4	1	11	4	3	29
Cloyne, . . .	14	9	6	9	14	5	4	64
Ross, . . .	3	..	..	..	4	1	5	13
Killaloe, . . .	3	2	2	4	12	6	1	30
Kilfenora, . . .	..	1	..	..	1	1	..	3
Clonfert, . . .	1	..	1	..	4	1	3	10
Kilmaeduaigh, . . .	..	..	..	..	2	1	1	4
TOTALS, . . .	55	49	51	49	192	114	75	615

2258 Roman Catholics per benefice. In 229 of these benefices the average Anglican population is only twenty-three, and, allowing five souls to a family, and deducting the two families of the rector and his clerk, there appears to be an average of not quite three families for the ministerial sphere of duty of each of these 229 incumbents. The average value of these smaller livings is £296 yearly, exclusively of glebe-house, and (adding the cost of episcopal functions, and of clerk, sexton, etc.) each of the twenty-three souls in these 229 benefices will be found to receive the advantage of an expenditure of at least £15 per head from the Church funds. Subdividing, in another way, these 615 livings, there will be found eighty-five of them, in none of which does the Anglican population exceed twenty. The actual average number of Anglicans in each of these livings is eleven. The total Anglican population of all these eighty-five livings is 955, and the total cost averages £20 per head out the ecclesiastical revenues.

There is one of these smaller benefices, namely, Mansfieldstown, in the diocese of Armagh, which has acquired notoriety, as being the only parochial benefice in Ireland which has no Anglican population at all, and yet has an incumbent, a clerk and sexton, a church and the usual requisites for divine service. 'A congregation attends



from the adjoining parish, which is conveniently,\* so it is said, 'situated for that purpose.'\* The gross value is £215, 12s. 3d., and altogether more than £250 yearly is spent out of the Church revenues upon the spiritual necessities—not of the Anglican parishioners, who amount to *nil*, nor of the Roman Catholics, who number 471, but of the 'adjoining parish,' which contains but fifty-five Anglicans, and has an incumbent and church of its own. The present rector of this benefice without souls is a wealthy bachelor of some thousands a year, who earns his church income by going each Sunday, with his servants and retinue, out of the parish where he lives, and into the parish where he does not live, thus, in common parlance, making two bites of that very small cherry represented by the division of his neighbour's total Church-population of fifty-five into two congregations. This application of Church funds does not, however, secure in all cases loyalty to the doctrines of the Church. The previous rector of this sinecure parish, who had enjoyed it for more than a quarter of a century, and along with it two other clerical offices in another province, bequeathed one thousand pounds to build near Dublin a Presbyterian Church. Another clergyman, who for twenty-five years held a small incumbency in the diocese of Cashel, which contained 28 Anglicans and 2947 Roman Catholics, left, at his death, which occurred only a year or two ago, his house and farm to the Roman Catholic priest of the parish.

Hallam, in his *Constitutional History* (vol. iii. p. 484), likened the Anglo-Irish Church to a 'government without subjects,' or, 'a college of shepherds without sheep.' And it must be confessed, his comparison is strikingly appropriate when applied to benefices where the Anglican population is counted by tens, and the Roman Catholic by thousands. 'No one can deny,' observed Bishop Diekenon, 'that as far as such parishes are concerned, the Church is overpaid and comparatively sinecure.' 'There can be no doubt,' said the same authority, in reference to a reform which he vainly hoped to see, 'that the income of such parishes will be diminished. It is useless for the Church to continue its struggles against this diminution. It is worse than useless; it is pernicious to its character, because it will be represented continually as drawing from an impoverished people, money which it does not employ effectively for the public good.†

Yet, it is asserted by some, that these parishes ought to be maintained for the sake of the 'shadowy hope of a remote proselytism. And by others, it is said that there are no inequalities in the Irish Church 'except such as are unavoidable, and exist to some extent in every Church establishment'!

The amount of Church revenue in Ireland has been very variously computed. Some say £390,000 or £400,000 is the income of the Church, but they base their calculations on the net income returned by the Commissioners, which is the net income of incumbents merely, and not of the Church. At page 57 of Stacpoole's return, a complete view is afforded of the process by which a gross income of large amount is reduced to a net income of nearly one half the gross; and this net income appears to be in truth what remains, after paying curates and all manner of charges, so as to render the living a perfect sinecure to the incumbent.\* The

*Church Property in Ireland, etc.*, pp. 12, 13. Dublin: Milliken, 1836.

\* The particulars of this benefice, as given in the Parliamentary return, are as follows:—

Gross income,	£1033 14 8
Deductions,—	
Two Curates, . . . . .	£180 0 0
Tax to Ecclesiastical Commissioners, . . . . .	35 10 10
Installments to Ecclesiastical Commissioners on account of a loan by Board of First Fruits, . . . . .	23 8 6
Rent of glebe lands, . . . . .	43 18 3
County rate on land in incumbent's occupation, . . . . .	4 11 0
Interest on charge paid to predecessor and not recoverable, at ten per cent., . . . . .	34 12 4
Do. do. at five per cent. on sum recoverable, . . . . .	51 18 5
Estimated poor-rates, . . . . .	93 6 4
Visitation and diocesan fees, . . . . .	6 16 4
Resident preacher at Cathedral, . . . . .	6 6 0
Insurance on glebe-house, . . . . .	7 4 0
	487 12 0

Net income, £546 2 8

The *Clerical Journal* of Nov. 30, 1865, has the following comment upon this living, which forms the corps of the Chancellorship of Limerick Cathedral:—

'This result is certainly startling, and, if the calculation be truthful, reduces the value of this preferment by nearly one-half. On referring, however, to the returns of ecclesiastical revenue made up in 1837, it appears that a house was built forty-six years ago, on this benefice, at a cost of £2861, 10s. 9½d., the annual value of which is altogether omitted from the gross income, although charges on account of it, to the amount of £117, 3s. 3d., appear among the deductions. As any dilapidations suffered to accumulate since its erection by the late incumbent have been paid by his representatives to the present Chancellor, it follows that the gross income should be increased by the value of the house,

\* See 'Facts' (?) respecting the present state of the Church in Ireland, 5th edit. p. 10. Rivingtons: London, 1866.

† See *Vindication of a Memorial* respecting

total Church revenue of Ireland was stated at page 114 of Staepoole's return to be, from all sources, £586,428, 8s. 1d., and in 1861, the Ecclesiastical Commissioners reckoned the total income of the Church at the sum of £580,419. But while it is certain that the value of episcopal palaces and glebe-houses was not included in that return, it is uncertain whether the Commissioners included *all* the sums received by themselves out of Church revenues. It is highly probable, that if the value of all the Church property in Ireland was fully stated, including the value of the Church lands, of which perpetuities have not yet been granted, it would amount to £700,000 per annum or more.

The late Archbishop Whately was fully sensible of the dangers resulting to the Church from its temporalities, which, like the fatal garment of fable which burnt up its wearer, seem to seorch and kill the inner life of the Church. In 1835, he proposed a plan for getting rid of these temporalities altogether, which plan consisted in the pur-

chase of all Irish tithe property by the State, and vesting the purchase-money in a board of commissioners, who should be empowered to buy land or annuities for the future maintenance of the clergy. The chief advantages which would have been derived from Whately's plan were the following:—*1st*, The State would have reaped, and that without loss to the Church, a large pecuniary profit by buying, at about sixteen years' purchase, a property worth much more. *2dly*, The Church would have gained a sufficient income, placed on a more secure foundation, with full power of redistribution according to work. *3dly*, All irritation arising from pecuniary transactions between the clergy and their flocks would have ceased,—a matter still of great importance, as forty-one per cent. of landed proprietors in Ireland are Roman Catholics. *4thly*, Protestant ascendancy would have disappeared from Ireland, and with it that 'erying grievance,' which, as Mr. Sergeant Talfourd observed, 'preys upon the vitals' both of England and Ireland. Whately's views did not, however, meet with much favour; the memorial to the Crown, in which they were embodied, was not numerously signed; and Dickenson, the Archbishop's chaplain, had to complain, that, with a few exceptions, 'vituperation was substituted for reasoning, and personal calumnies invented as grounds of opposition to the memorial.'

or at least that the charges on account of it should be struck off the deductions. If this latter alternative be adopted, the net income will be increased by the sum of £117, 3s. 3d. But the Chancellor of Limerick has another source of income not specified in the gross income, namely, the amount of what is paid to him or his curate, as chaplain of Rathkeale Workhouse, for attending to the Protestant inmates of that institution, who are about sixteen in number. This will add another twenty pounds at least to the net income of the Chancellor. His net income will accordingly be, if these calculations are correct, £624, 15s. 3d. per annum, besides whatever profits he may derive from the land in his own occupation, over and above the rent. There is something, however, besides the revenue which requires to be taken into consideration in estimating the net income of the Chancellor of Limerick. The work done for the money is surely a part of the calculation. The entire population of the five parishes forming the corps of the Chancellorship amounts to the number of 6796 individuals, of whom 578 only are members of the Established Church, and all of these Anglicans, except 26, live in two parishes, Rathkeale and Kilsannell. 578 individuals are not an enormous number to be in one clergyman's care, nor is it impossible for one rector to serve two churches with a workhouse. The Chancellor of Limerick, however, pays two curates, and also a resident preacher at Limerick Cathedral, to discharge the entire of his duties as Chancellor, which are stated (at page 200 of the Second Report of the Commissioners of Ecclesiastical Revenue, printed in 1831), to consist of "preaching six sermons in the year in the Cathedral Church, which duty is discharged by deputy." It thus appears that the net income of the Chancellor of Limerick is either £624, 15s. 3d. for doing little or nothing, or else (adding the sum of £180 paid to two curates) £804, 15s. 3d. per annum, inclusively of house, or £687, 12s. per annum, with a residence, which cost £2861, for discharging the duties incident to the parochial charge of less than 600 souls.'

It is deeply to be regretted that the Anglican bishops in Ireland are in 1866 just as little disposed as their predecessors were in 1835 to promote Church reform. While it is evident to the world that their Church has utterly failed in its true mission (which is to bring 'the great truths of religion home to the minds of the people'), the Anglican bishops seem indifferent to that fact, and have no plans to propose either for removal of anomalies or remedy of grievances. 'Their strength' (so think their Lordships) 'is to sit still.' But they do not all sit in silence, and, unfortunately for themselves, the recent 'Charges' of some of them have been so loud and so defiant as to excite the anger of their foes and the alarm of their friends. Fierce denunciations of Popery come with ill grace from bishops enjoying the temporal spoils of the Papal Church. Confessions that the Church, as a machinery for political or religious purposes, has failed, after a trial of 300 years, fall with tremendous force from the lips of perhaps the most learned bishop on the Episcopal bench, and go far to damage the institution in whose behalf they were apparently uttered. This is not precisely the period for a bishop of the State Church, like Verschoyle (whose dio-

ceses of Kilmore, Elphin, and Ardagh contain 483,579 Roman Catholics, but only 53,196 Anglicans), to call the religion of the majority of his nominal subjects an 'Anti-Christian communion,' and their spiritual ruler 'Antichrist.' It is hardly fair in a State bishop to talk of Roman Catholicism as a 'leprous spot,' or 'a crop of boils on the fair body of the Church,' and to urge his clergy to make 'no peace with Rome.' Bishop Fitzgerald, of Killaloe, can scarcely expect many to agree with him when he says that 'even viewing the measure as a question of statesmanship, it was the wisest policy' to adopt a system which has resulted in giving 319,403 Roman Catholics to the nominal control of a prelate, who in reality can count only 15,906 spiritual adherents; for that is the sum-total of the Anglican inhabitants of Killaloe, Kilfenora, Clonfert, and Kilmacduagh. But whoever wishes to see how far Irish bishops will proceed in supporting the present Establishment, had better read the 'Charges' of Primate Beresford and Bishop Higgin, who seem to vie with each other in demonstrating that the Irish anomaly is faultless, or at least has no faults except those engendered by time. A parish without parishioners, or a church without a congregation, appears to those prelates only a reasonable and happy variety, by no means to be deplored or remedied, but to be regarded as on the whole beneficial. It is, of course, natural in Primate Beresford, whose antecedents are quite in accordance with such sentiments, to exclaim 'No Surrender;' but it is astonishing to find Bishop Higgin, a sober Englishman, echoing such a cry. Bishop Higgin regards as 'incrustations of time' those anomalies which existed when Protestantism was first forced on the Irish by English power. He appears to think that Irish tithes, originally granted, in 1172, by Roman Catholics for the support of Romanism, were bequeathed 'to our own branch' of the Church by the piety of Protestants! And he actually hints that the Reformed Church, if deprived of her monopoly of the Irish religious endowments, would be reduced to the position of the persecuted early Church, 'while she was worshipping in the upper-room, or in the dark catacomb!' Yet a little before this pathetic appeal *ad misericordiam*, the worthy bishop had boasted of his Church as possessing the 'great bulk of the landed proprietors,' the 'capitalists,' and 'the members of the learned professions in Ireland.' It surely would not amount to a very grievous persecution, if so rich and so enlightened a minority as that of the learned members of the Anglican Church in Ire-

land were permitted to maintain its own ministers!

There seems, then, small reason to expect from Anglican bishops in Ireland any aid towards the solution of the Irish difficulty. The Reformed clergy appear secure in their life-interests, and therefore are contented to allow things to take their course, and to let their ecclesiastical posterity take care of itself. The language of some Church defenders, who say the ecclesiastical settlement of Ireland cannot be disturbed without a revolution, sounds as if an appeal to force or a civil war in behalf of their endowments was regarded as probable. There are, doubtless, Anglican clergymen in Ireland, as there were in the Tithe war of thirty years ago, who would suffer the blood of the people, whose 'conversion' they affect to desire, to be shed rather than surrender the revenues to which their moral claim is so dubious; but the issue, it is to be hoped, will be decided by reason, not by the sword. It is a permanent, not a temporary settlement of the question that is desired. 'I think it not unlikely' (wrote Whately to the Bishop of Llandaff in 1832) 'that the Orange party spirit, if called into action in the manner you speak of, may crush the opposite party for a time; but the permanent pacification of Ireland through the Orange party can only take place by the total extermination of the Roman Catholic population.' That great and good man, Richard Whately, although himself an archbishop of the Anglican Church in Ireland, was not blind to the anomalous position of that Church, which 'in large districts of Ireland,' he did not hesitate to say, was 'such as, by the help of a map, you might establish in Turkey or in China.' He did not deny the grievance or 'the sort of insult implied by the spectacle of an endowed clergyman whose flock are not of his persuasion.' He rejoiced when it was 'proposed to adopt what has been called the re-distributive or congregational system, namely, that of proportioning the revenues in future in some degree to the amount of their congregations, and not merely to the physical extent of territory.' He was not ashamed to confess the truth that 'the Papists are goaded to madness by perpetual causes of irritation;' and he did not shrink from pointing out the only remedy sufficient, in his opinion, to heal the disorders of Ireland. 'In fact' (said Archbishop Whately), 'I have no hope whatever of permanent peace till the Irish clergy are maintained by Government. And as the spoliation of the revenues of the Roman Catholic Church was an act of the King and Legislature, so it is the part of the nation—the United Em-

pire—to rectify the wrong, and that at the public expense.’

And some such settlement as that proposed by Whately, and indicated at p. 363, seems the only mode of preserving a maintenance for the successors of the present Anglo-Irish clergymen, who are secure, no doubt, of their own life-interests, and therefore ought to adopt, ere it be too late, measures for providing for the future of their Church. The Church will not be able ‘to save her position in the constitution by clinging to the skirts of the English Church, or appealing to the Act of Union.’\* It will not be maintained for the benefit of ‘the leading classes,’ or as guardian of faith and ‘leader of religious thought,’† among a population which rejects it. It will be maintained, if at all, by the good sense and rational conduct of its own members, if they shall have courage to descend from an untenable position, and accept a solution of the question which will take away ascendancy and strife, and leave to the clergy a provision competent for their needs. The Irish clergy in general, and those of them especially who prize a Church for the sake of its spiritual efficiency—and not for its wealth—are as deeply interested as Roman Catholics can possibly be, in the speedy settlement of this question. Every debate on the subject exhibits the Anglo-Irish clergy to the world as impediments to just government and opponents of religious equality. Church life must necessarily be paralysed during the protraction of this parliamentary warfare, which is waged on one side in behalf of what all the world acknowledges to be equitable in the abstract, and on the other side for the sake of a pecuniary and political status, which is not only not essential, but is positively damaging, to the religion it pretends to strengthen. The Anglo-Irish Church may continue its struggles against further modifications of its Temporalities, but it will be under the distressing conviction that eventual defeat is certain, while no temporary triumphs can produce peace. A recurrence is, of course, impossible of those horrid scenes enacted in Ireland within living memory, when the legal rights of the Established clergy were enforced by the sword, and when defaulting tithe-payers were shot down by fire-arms, loaded for the occasion by the hands of the rector of the parish, but the old evil party-spirit may be evoked, and the demon of bigotry may spread spiritual desolation throughout the land. Agitation

kept up both for the defence and attack of the Temporalities, cannot but be prejudicial in the extreme to the best interests of Christianity, and the cure of souls must continue to languish as long as the plague of religious animosity makes havoc of the Church.

If the case of the Irish people against the Church Establishment, which their conquerors imposed on them, were to be arranged by an appeal to the simplest principles of righteousness, a settlement would be speedily arrived at. The temporalities or establishment would at once be taken from that Reformed Church, which unhappily never at any time possessed—what alone could give an equitable or moral title to the Irish Church property—the spiritualities of the Irish nation. Ample compensation would of course be given to present incumbents and to the holders of private patronage, so that no pecuniary injury would be inflicted on any individual. The property thus resumed by the State would again become available for its original purpose, namely, the supply of religious ministrations to the bulk of the population. The Anglican Church would thenceforth be maintained, chiefly on the congregational system, by the contributions of those wealthy persons, landed proprietors, and professional men who belong to it. But it is said that Roman Catholics will not accept the endowments or temporalities, unless on conditions too liberal for any Government to grant. This alleged hesitation on the part of Roman Catholics opens a most favourable opportunity for the settlement of the question on terms which the Reformed Church could hardly, in strict equity, demand. For the Government have it now in their power to avail themselves of this temporary hesitation and coyness of Roman Catholics as an occasion for granting a large measure of compensation to the Anglican Church, without the least expense to the imperial resources. The Irish Church property, thus refused by Roman Catholics, will fall into the hands of the State, so that pecuniary gain instead of loss will accrue to the United Kingdom; and Roman Catholics would scarcely offer a very strong opposition to the grant of a liberal compensation to present incumbents, even although that compensation should take such a shape as to provide indirectly for the future maintenance of the Reformed Church in Ireland as a voluntary institution. For if it be understood that the present religious ascendancy of the Establishment shall be removed, and a stop for ever put to the absurd claims of a territorial or parochial Anglicanism, there remains no reason why Roman Catholics should desire the pauperization of congregational

\* See *Essays on the Irish Church*, etc., p. 2. James Parker & Co.: London, 1866.

† *Ibid.* p. 37.

Anglican ministers. The Roman Catholic policy seems rather to lie in permitting the erection of a golden bridge for the comfortable retreat of the rival and sister Church, so that she may have no excuse for becoming a clamorous pensioner on the funds of Exeter Hall. But the one thing needful is the abolition in Ireland of the legal supremacy of reformed Anglicanism, and the withdrawal of the temporalities from the Church introduced and maintained by English arms. The disposal of those temporalities, after due provision shall have been made for the satisfaction of existing interests, is a matter of secondary importance, which may be quietly settled hereafter by deliberations for which there will be ample leisure. At present the urging and pressing grievance is the existence of the Establishment; and the removal of this great and monstrous anomaly cannot with safety be long delayed.

Most of our leading statesmen, as has been already shown, have spoken on this subject; but, strange to say, the tone of the press is far less satisfactory. That a paper animated by the Church principles of the *Saturday Review* should sneer at the proposal to abolish the Irish Church as an idea of *doctrinaries* was to be expected; but it is more difficult to understand why certain papers which claim to be really Liberal should make light of this as a remedy for Irish discontent. They impress on us with wearisome iteration that the existence of the Irish Establishment is not the grievance most frequently and most loudly denounced by the Irish themselves. The fact is beyond dispute: the argument founded upon it is beneath contempt. The Irish do not indeed put forward their Establishment as among the heaviest of the wrongs they have to bear; but is that any reason why England should persevere in doing injustice? How can we tell that the feelings of the people are not moved by the existence of this gigantic iniquity—unconsciously to themselves? 'It is very shallow,' says Mr. Mill, 'even in pure economics, to forget the influence of the imagination;' and it is still more shallow to forget their influence in the sphere of general politics. How often, in the history of nations, has an oppressed people mistaken the causes of its suffering, and the cure! And is it to be maintained that the governing class is to avail itself of such mistakes so as to perpetuate evils, the magnitude of which it does not pretend to deny? Is not this wilfully and scandalously to neglect the duties and abdicate the position of rulers?

It is beyond our present purpose to enter upon the discussion of any Irish 'grievance,' beyond that with which we have been con-

cerned. But we cannot refrain from noticing what seems to us a very alarming phenomenon, viz., the helplessness lately exhibited by the English press in dealing with the Irish 'difficulty.' Mr. Bright's visit to Dublin elicited comments from almost every newspaper. By the great majority, the remedies he proposed were condemned or laughed at. But none of the journals which wrote in this strain could propose any remedies of their own. Content with the present state of matters they could not affect; and yet there was in no quarter even a suggestion tending towards improvement. The land question was disposed of by the statement that the law which the Irish dislike is the same as that which is found to answer in England—the necessary conclusion of course being that it is the best of all possible laws; the Church grievance was set aside by being called 'sentimental.' We confess to thinking this a most ineffectual way of touching a vital and increasing mischief. It is, indeed, a dismal sign of the times that such arguments should be generally put forward—seemingly without any sense of their unworthiness. And while we are arguing thus foolishly and thus dishonestly, the aspect of affairs is growing more and more gloomy. The present discontent in Ireland we believe to be far more deep and wide-spread than is dreamt of by the majority of Englishmen; and did we feel that nothing was possible to us but this helpless acquiescence, we should look with great alarm on the future of the Empire. But we are thankful to believe that something very different is yet possible to us. We cannot err in beginning with the Irish Establishment. If we can defend that Church on honest grounds, well and good; but if we cannot uphold it as a just thing, should we go on in the commission of injustice, because we flatter ourselves—it may be quite falsely—that our wrong-doing bears no fruit, that our sin has not found us out? Let us, in the name of common honesty, put away from us such miserable devices, and learn, 'because right is right, to follow right.' It may be that we shall have our reward. It may be that the removal of 'sentimental' grievances may not be wholly without effect on a sentimental nation; at all events, we shall have done our duty.

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ART. IV.—1. *Historia Diplomatica Frederici Secundi*, etc. Collegit, etc., J. L. A. HUIILLARD-BRÉHOLLES, auspiciis et sumptibus H. DE ALBERTIS DE LUNES. Préface et introduction. Paris: H. Plon, 1859.

2. *History of Frederick the Second, Emperor of the Romans.* By T. L. KINGTON [BLAIR-OLIPHANT], M. A. Cambridge and London: Macmillan, 1862.
3. *Vie et Correspondance de Pierre de la Vigne, Ministre de l'Empereur Frédéric II., etc.* Par A. HUYLLARD-BRÉHOLLES. Paris: H. Plon, 1866.

'*Stupor mundi Fredericus*'—Frederick the Wonder of the World—is the name by which the English historian Matthew Paris more than once speaks of the Emperor who drew on him the eyes of all men during the greater part of the former half of the thirteenth century, and whose name has ever since lived in history as that of the most remarkable man in a most remarkable age. We do not say the greatest, still less the best, man of his time; but, as Matthew Paris calls him, the most wonderful man; the man whose character and actions shone out most distinctively, the man whose personality was most marked; the man, in short, who was in all things the most unlike to all the other men who were about him. It is probable that there never lived a human being endowed with greater natural gifts, or whose natural gifts were, according to the means afforded him by his age, more sedulously cultivated, than the last Emperor of the House of Swabia. There seems to be no aspect of human nature which was not developed to the highest degree in his person. In versatility of gifts, in what we may call manysidedness of character, he appears as a sort of mediæval Alcibiades, while he was undoubtedly far removed from Alcibiades' utter lack of principle or steadiness of any kind. Warrior, statesman, lawgiver, scholar, there was nothing in the compass of the political or intellectual world of his age which he failed to grasp. In an age of change, when, in every corner of Europe and civilized Asia, old kingdoms, nations, systems, were falling and new ones rising, Frederick was emphatically the man of change, the author of things new and unheard of—he was '*stupor mundi et immutator mirabilis*.' A suspected heretic, a suspected Mahometan, he was the object of all sorts of absurd and self-contradictory charges; but the charges mark real features in the character of the man. He was something unlike any other Emperor or any other man; whatever professions of orthodoxy he might make, men felt instinctively that his belief and his practice were not the same as the belief and the practice of other Christian men. There can be no doubt that he had quite emancipated his mind from the trammels of his own time, and that he had theories and designs which, to most of his con-

temporaries, would have seemed monstrous, unintelligible, impossible. Frederick in short was, in some obvious respects, a man of the stamp of those who influence their own age and the ages which come after them, the men who, if their lot is cast in one walk, found sects, and if it is cast in another, found empires. Of all men, Frederick the Second might have been expected to be the founder of something, the beginner of some new era, political or intellectual. He was a man to whom some great institution might well have looked back as its creator, to whom some large body of men, some sect or party or nation, might well have looked back as their prophet or founder or deliverer. But one of the most gifted of the sons of men has left behind him no memory of this kind, while men whose gifts cannot bear a comparison with his are revered as founders by grateful nations, churches, political and philosophical parties. Frederick in fact founded nothing, and sowed the seeds of the destruction of many things. His great charters to the spiritual and temporal princes of Germany dealt the death-blow to the Imperial power, while he, to say the least, looked coldly on the rising power of the cities and on those commercial Leagues which were the best element of German political life in his time. In fact, in whatever aspect we look at Frederick the Second, we find him, not the first, but the last, of every series to which he belongs. An English writer, two hundred years after his time, had the penetration to see that he was really the last Emperor.\* He was the last prince in whose style the Imperial titles do not seem a mockery; he was the last under whose rule the three Imperial kingdoms retained any practical connexion with one another and with the ancient capital of all. Frederick, who sent his trophies to Rome to be guarded by his own subjects in his own city, was a Roman Cæsar in a sense in which no other Emperor was after him. And he was not only the last Emperor of the whole Empire; he might almost be called the last King of its several Kingdoms. After his time Burgundy vanishes as a kingdom; there is hardly an event to remind us of its existence except the fancy of Charles the Fourth, of all possible Emperors, to go and take the Burgundian crown at Arles. Italy too, after Frederick, vanishes as a kingdom; any later exercise of the royal authority in Italy was something which came and went wholly by

\* Capgrave, in his Chronicle, dates by Emperors down to Frederick, and then adds; 'Fro this tyme forward oure annotacion schal be aftir the regne of the Kyngis of Yngland; for the Empire, in maner, sused here.'



fits and starts. Later Emperors were crowned at Milan, but none after Frederick was King of Italy in the same real and effective sense that he was. Germany did not utterly vanish, or utterly split in pieces, like the sister kingdoms; but after Frederick came the Great Interregnum, and, after the Great Interregnum, the royal power in Germany never was what it had been before. In his hereditary kingdom of Sicily he was not absolutely the last of his dynasty, for his son Manfred ruled prosperously and gloriously for some years after his death. But it is none the less clear that from Frederick's time the Sicilian kingdom was doomed; it was marked out to be, what it has been ever since, divided, reunited, divided again, tossed to and fro between one foreign sovereign and another. Still more conspicuously than all was Frederick the last Christian King of Jerusalem, the last baptized man who really ruled the Holy Land or wore a crown in the Holy City. And yet, strangely enough, it was at Jerusalem, if anywhere, that Frederick might claim in some measure the honours of a founder. If he was the last more than nominal King of Jerusalem, he was also after a considerable interval, the first; he recovered the kingdom by his own address, and, if he lost it, its loss was, of all the misfortunes of his reign, that which could be with the least justice attributed to him as a fault. In the world of elegant letters Frederick has indeed some claim to be looked on as the founder of that modern Italian language and literature which first assumed a distinctive shape at his Sicilian court. But in the wider field of political history, Frederick appears nowhere as a creator, but rather everywhere as an involuntary destroyer. He is in everything the last of his own class, and he is not the last in the same sense as princes who perish along with their realms in domestic revolutions or on the field of battle. If we call him the last Emperor of the West, it is in quite another sense from that in which Constantine Palaiologos was the last Emperor of the East. Under Frederick, the Empire and everything connected with it seems to crumble and decay while preserving its external splendour. As soon as its brilliant possessor is gone, it at once collapses. It is a significant fact that a prince, perhaps in mere genius, in mere accomplishments, the greatest who ever wore a crown, who held the greatest place on earth, and was concerned during a long reign in some of the greatest transactions of one of the greatest ages, seems never, even from his own flatterers, to have received that appellation of Great which has been so lavishly bestowed on far smaller men. The world

instinctively felt that Frederick, the natural peer of Alexander, of Constantine, and of Charles, had left behind him no such creation as they left, and had not influenced the world as they had influenced it. He was 'stupor mundi et immutator mirabilis,' but the name of 'Fredericus Magnus' was reserved for a prince of quite another age and house, who, whatever else we say of him, at least showed that he had learned the art of Themistocles, and knew how to change a small state into a great one.

Many causes combined to produce this singular result, that a man of the extraordinary genius of Frederick, and possessed of every advantage of birth, office and opportunity, should have had so little direct effect upon the world. It is not enough to attribute his failure to the many and great faults of his moral character. Doubtless they formed one cause among others. But a man who influences future ages is not necessarily a good man. Few men have ever had a more direct influence on the future history of the world than Lucius Cornelius Sulla. The man who crushed Rome's last rival, who saved Rome in her last hour of peril, who made her indisputably and permanently the head of Italy, did a work almost greater than the work of Cæsar. Yet the name of Sulla is one at which we almost instinctively shudder. So the faults and crimes of Frederick, his irreligion, his private licentiousness, his barbarous cruelty, would not of themselves be enough to hinder him from leaving his stamp upon his age in the way that other ages have been marked by the influence of men certainly not worse than he. Still, it seems that, to exercise any great and lasting influence on the world, a man must be, if not virtuous, at least capable of objects and efforts which have something in common with virtue. Sulla stuck at no crime which would serve his country or his party, but it was for his country and his party, not for purely selfish ends, that he laboured and that he sinned. Thorough devotion to any cause has in it something of self-sacrifice, something which, if not purely virtuous, is not without an element akin to virtue. Very bad men have achieved very great works, but they have commonly achieved them by virtue of those features in their character which made the nearest approach to goodness. The weak side in the brilliant career of Frederick is one which seems to have been partly inherent in his character, and partly the result of the circumstances in which he found himself. Capable of every part, and, in fact, playing every part by turns, he had no single definite object, pur-

sued honestly and steadfastly, throughout his whole life. With all his powers, with all his brilliancy, his course throughout life seems to have been in a manner determined for him by others. He was ever drifting into wars, into schemes of policy, which seem to be hardly ever of his own choosing. He was the mightiest and most dangerous adversary that the Papacy ever had. But he does not seem to have withstood the Papacy from any personal choice, or as the voluntary champion of any opposing principle. He became the enemy of the Papacy, he planned schemes which involved the utter overthrow of the Papacy, yet he did so simply because he found that no Pope would ever let him alone. It was, perhaps an unerring instinct which hindered any Pope from ever letting him alone. Frederick, left alone to act according to his own schemes and inclinations, might very likely have done the Papacy more real mischief than Frederick provoked to open enmity. Still, as a matter of fact, his quarrels with the Popes were not of his own seeking; a sort of inevitable destiny led him into them, whether he wished for them or not. Again, the most really successful feature in Frederick's career, his acquisition of Jerusalem, is not only a mere episode in his life, but it was something that was absolutely forced upon him against his will. The most successful of Crusaders since Godfrey is the most utterly unlike any other Crusader. With other Crusaders the Holy War was, in some cases, the main business of their lives; in all cases it was something seriously undertaken as a matter either of policy or of religious duty. But the Crusade of the man who actually did recover the Holy City is simply a grotesque episode in his life. Excommunicated for not going, excommunicated again for going, excommunicated again for coming back, threatened on every side, he still went, and he succeeded. What others had failed to win by arms he contrived to win by address, and his success simply became the ground of fresh accusations against him. For years the cry for the recovery of Jerusalem had been resounding through Christendom; at last Jerusalem was recovered, and its recoverer was at once cursed for accomplishing the most fervent wishes of so many thousands of the faithful. The excommunicated King, whom no churchman would crown, whose name was hardly allowed to be uttered in his own army, kept his dominions in spite of all opposition. He was hindered from the further consolidation and extension of his eastern kingdom only by a storm stirred up in his hereditary states by those who were

most bound to show towards him something more than common international honesty. Whatever were the feelings and circumstances under which he had acted, Frederick was in fact the triumphant champion of Christendom, and his reward was fresh denunciations on the part of the spiritual chief of Christendom. The elder Frederick, Philip of France, Richard of England, Saint Lewis, Edward the First, were Crusaders from piety, from policy, or from fashion; Frederick the Second was a Crusader simply because he could not help being one, and yet he did what they all failed to do. So again in his dealings with both the German and the Italian States, it is impossible to set him down either as a consistent friend or a consistent enemy of the great political movements of the age. He issues charters of privileges to this or that commonwealth, he issues charters restraining the freedom of commonwealths in general, simply as suits the policy of the time. In his dealings with the Popes, perhaps in his dealings with the cities also, Frederick was certainly more sinned against than sinning. But a man whose genius and brilliancy and vigour shine out in every single action of his life, but in the general course of his actions no one ruling principle can be discerned, who is as it were tossed to and fro by circumstances and by the actions of others, is either very unfortunate in the position in which he finds himself, or else, with all his genius, he must lack some of the qualities without which genius is comparatively useless.

In the case of Frederick probably both causes were true. For a man to influence his age, he must in some sort belong to his age. He should be above it, before it, but he should not be foreign to it. He may condemn, he may try to change, the opinions and feelings of the men around him; but he must at least understand and sympathize with those opinions and feelings. But Frederick belongs to no age; intellectually he is above his own age, above every age; morally it can hardly be denied that he was below his age; but in nothing was he of his age. In many incidental details his career is a repetition of that of his grandfather. Like him he struggles against Popes, he struggles against a league of cities, he wears the Cross in warfare against the Infidel. But in character, in aim, in object, grandfather and grandson are the exact opposite to each other. Frederick Barbarossa was simply the model of the man, the German, the Emperor, of the twelfth century. All the faults and all the virtues of his age, his country, and his position received in him their fullest

development. He was the ordinary man of his time, following the objects which an ordinary man of his time and in his position could not fail to follow. He exhibited the ordinary character of his time in its very noblest shape; but it was still only the ordinary character of his time. His whole career was simply typical of his age, and in no way personal to himself; every action and every event of his life was perfectly intelligible to every contemporary human being, friend or enemy. But his grandson, emphatically 'stupor mundi,' commanded the wonder, perhaps the admiration, of an age which could not understand him. He gathered indeed around him a small band of devoted adherents; but to the mass of his contemporaries he seemed like a being of another nature. He shared none of the feelings or prejudices of the time; alike in his intellectual greatness and in his moral abasement he had nothing in common with the ordinary man of the thirteenth century. The world probably contained no man, unless it were some solitary thinker here and there, whose mind was so completely set free, alike for good and for evil, from the ordinary trammels of the time. He appeared in the eyes of his own age as the enemy of all that it was taught to hold sacred, the friend of all that it was taught to shrink from and wage war against. What Frederick's religious views really were is a problem hard indeed to solve; but to his own time he appeared as something far more than a merely political, or even than a doctrinal, opponent of the Papacy. Men were taught to believe that he was the enemy of the head of Christendom simply because he was the enemy of Christianity altogether. Again, the crimes and vices of Frederick were no greater than those of countless other princes; but there was no prince who trampled in the like sort upon all the moral notions of his own time. He contrived, by the circumstances of his vices, to outrage contemporary sentiment in a way in which his vices alone would not have outraged it. A man who thus showed no condescension to the feelings of his age, whether good or evil, could not directly influence that age. Some of his ideas and schemes may have been silently passed on to men of later times, in whose hands they were better able to bear fruit. He may have shaken old prejudices and old beliefs in a few minds thus; he may perhaps have been the fountain of a tradition which was powerfully to affect distant ages. In many things his ideas, his actions, forestalled events which were yet far remote. The events which he forestalled he may in this indirect and silent way have influenced. But direct influence

on the world of his own age he had none. He may have undermined a stately edifice which was still to survive for ages; but he simply undermined. He left no traces of himself in the character of a founder; he left as few in the character of an open and avowed destroyer.

There was also another cause which, besides Frederick's personal character, may have tended to isolate him from his age and to hinder him from having that influence over it which we may say that his genius ought to have had. This was his utter want of nationality. The conscious idea of nationality had not indeed the same effect upon men's minds which it has in our own times. The political ideas and systems of the age ran counter to the principle of nationality in two ways. Nothing could be more opposed to any doctrine of nationality than those ideas which were the essence of the whole political creed of the time, the ideas of the Universal Empire and the Universal Church. On the other hand, the conception of the joint lordship of the world, vested in the successor of Peter and the successor of Augustus, was hardly more opposed to the doctrine of nationality than was the form which was almost everywhere taken by the rising spirit of freedom. A movement towards national freedom was something exceptional; in most places it was the independence of a district, of a city, at most of a small union of districts or cities, for which men strove. A German or Italian commonwealth struggled for its own local independence; so far as was consistent with the practical enjoyment of that independence, it was ready to acknowledge the supremacy of the Emperor, Lord of the World. But of a strictly national patriotism for Germany or Italy men had very little idea indeed. These two apparently opposite tendencies, the tendency to merge nations in one universal dominion, and the tendency to divide nations into small principalities and commonwealths, were in truth closely connected. The tendency to division comes out most strongly in the kingdoms which were united to the Empire. Other countries showed a power of strictly national action, of acquiring liberties common to the whole nation, of legislating in the interest of the whole nation, almost in exact proportion to the degree in which they were placed beyond the reach of Imperial influences. Spain, Scandinavia, Britain, were the countries on which the Empire had least influence. Spain, Scandinavia, Britain, were therefore the countries in which we see the nearest approaches to true national life and consciousness. Still there is no doubt that, even within the Empire, national feelings did ex-

ercise a strong, though in a great measure an unconscious, influence. Local feelings exercised an influence still stronger. But there was no national or local feeling which could gather round Frederick the Second. There was no national or local cause of which he could be looked on as the champion. There was no nation, no province, no city, which could claim him as its own peculiar hero. Ruling over men of various races and languages, he could adapt himself to each of them in turn in a way in which few men before or after him could do. But there was none of the various races of his dominions, German, Burgundian, Italian, Norman, Greek, or Saracen, which could really claim him as bone of its bone, and flesh of its flesh. His parentage was half German, half Norman, his birthplace was Italian, the home of his choice was Sicilian, his tastes and habits were strongly suspected of being Saracenic. The representative of a kingly German house, he was himself, beyond all doubt, less German than anything else. He was Norman, Italian, almost anything rather than German; but he was far from being pure Norman or pure Italian. In this position, placed as it were above all ordinary local and national ties, he was, beyond every other prince who ever wore the Imperial diadem, the embodiment of the conception of an Emperor, Lord of the World. But an Emperor, Lord of the World, is placed too high to win the affections which attach them to rulers and leaders of lower degree. A King may command the love of his own Kingdom; a popular leader may command the love of his own city. But Caesar, whose dominion is from the one sea to the other, and from the flood unto the world's end, must, in this respect, as in others, pay the penalty of his greatness. Frederick was, in idea, beyond all men, the hero and champion of the Empire. But practically the championship of the Empire was found less truly effective in his hands than in the hands of men who were further from realizing the theoretical ideal. The Imperial power was more really vigorous in the hands of princes in whom the ideal championship of the Empire was united with the practical leadership of one of its component nations. Frederick Barbarossa, the true German King, the man in whom the German instinct at once realises the noblest development of the German character, really did more for the greatness of the Empire than his descendant, whose ideal position was so far more truly Imperial. The men who influence their age, the men who leave a lasting memory behind them, are the men who are thoroughly identified with the actual or

local life of some nation or city. Frederick Barbarossa was the hero of Germany, but his grandson, the hero of the Empire, was the hero of none of its component parts. The memory of his grandfather still lives in the hearts of a people, some of whom perhaps even now look for his personal return. The memory of the grandson has everywhere passed away from popular recollection; the Wonder of the World remains to be the wonder of scholars and historians alone.

In this last respect the memory of Frederick the Second has certainly nothing to complain of. Few princes have ever had such a monument raised to them as has been raised to the memory of the last Swabian Emperor by the munificence of the Duke of Luynes and the learning and industry of M. Huillard-Bréholles. Here, in a series of noble quartos, are all the documents of a reign most fertile in documents, ushered in by a volume which, except in not assuming a strictly narrative form, is essentially a complete history of Frederick's reign. M. Huillard-Bréholles seems literally to have let nothing escape him. He discusses at length everything which in any way concerns his hero, from the examination of schemes which sound very like the institution of a new religion, down to the minutest particulars of form in the wording, dating and spelling of the Emperor's official acts. We never saw a book which is more thoroughly exhaustive of the subject with which it deals. It is not a history, merely because the form of an Introduction or Preface seems to have prescribed to M. Bréholles the necessity of giving us, instead of a single regular narrative, a series of distinct narrative discussions of each of the almost countless aspects in which the reign of Frederick can be looked at. M. Bréholles has also followed up his great work by a monograph of the life and aims of one whose history is inseparably bound together with that of Frederick, his great and unfortunate minister, Peter de Vineâ. In this he examines at full length a subject to which we shall again return, and which is perhaps the most interesting of all which the history of Frederick presents—namely, the relation of the free-thinking and reforming Emperor to the received religion of this age. On this point we cannot unreservedly pledge ourselves to all the details of M. Bréholles' conclusions; but they are at least highly ingenious, and the contemporary evidence on which he grounds them is most singular and interesting, and deserves most attentive study. Altogether, we can have no hesitation in placing M. Bréholles' investigation of the reign of Frederick the Second among the most im-

portant contributions which our age has made to historical learning.

Nor has the character and history of Frederick failed to attract notice among scholars in our own country. His career supplies materials for one of the most brilliant parts of Dean Milman's *History of Latin Christianity*; there is no part of his great work which is more palpably a labour of love. More recently has appeared the *History of Frederick* by Mr. Kington-Oliphant, the production of a young writer, and which shows want of due preparation in some of the introductory portions, but which also shows real research and real vigour as the author approaches his main subject, the life of Frederick himself. Mr. Oliphant is confessedly a disciple of M. Bréholles, and his volumes, as supplying that direct and continuous narrative which M. Bréholles' plan did not allow of, may be taken as a companion-piece to the great work of his master.

The reign of Frederick, like that of his predecessor, Henry the Fourth, was nearly co-extensive with his life. His history began while he was in his cradle. Like Henry the Fourth, after filling the first place in men's minds for a long series of years, he died at no very advanced period of life. Frederick, born in 1194, died in 1250, at the age of fifty-six. Henry at the time of his death was a year younger. Yet it marks a difference between the two men that historians seem involuntarily, in defiance of chronology, to think and speak of Henry in his later years as quite an aged man. No one ever speaks in this way of Frederick. The Wonder of the World seems endowed with a sort of undying youth, and, after all the great events and revolutions of his reign, we are at last surprised to find that we have passed over so many years as we really have. Frederick was a King almost from his birth. The son of the Emperor Henry the Sixth, and of Constance the heiress of Sicily, he was born while his father was in his full career of success and cruelty. His very birth gave occasion to mythical tales. The comparatively advanced age of his mother, which, however, has been greatly exaggerated, gave occasion to rumours of opposite kinds. His enemies gave out that he was not really of Imperial birth, and that the childless Empress had palmed off a supposititious child on her husband. His admirers hailed in him a birth wonderful, if not miraculous, and placed the conception of Constance alongside of the conceptions of the mothers of Isaac, of Samuel, and of John the Baptist. Elected King of the Romans in his infancy, his father's death left him in his third year his successor in the

Sicilian kingdom, and his mother's death in the next year left an orphan boy as the heir alike of the Hohenstaufen Emperors and of the Norman Kings. His election as King of the Romans seems to have been utterly forgotten; after the death of his father, the Crown was disputed by the double election of Otto of Saxony and of Frederick's own uncle Philip. The child in Sicily was not thought of till the assassination of Philip, just when fortune seemed to have finally decided for him; till Otto, reaping the advantage of a crime of which he was guiltless, had been enabled to secure both the Kingdom and the Empire, and till he had fallen into disgrace with the Pontiff by whose favour he had at first been supported. Meanwhile the Sicilian kingdom had been torn by rebellions and devastated by mercenary captains. The land had at last been restored to some measure of peace, and the young King to some measure of authority, by the intervention of the over-lord Pope Innocent. A husband at fifteen, a father at eighteen, Frederick was, almost simultaneously with the birth of his first son, Henry, the future King and rebel, called to the German Crown by the party which was discontented with Otto, now under the ban of the Church. Frederick, destined to be the bitterest enemy of the Roman See, made his first appearance on German soil as its special nursling, called to royalty and Empire under the auspices of the greatest of the Roman Pontiffs. He came also, there seems little reason to doubt, under patronage of a less honourable kind. The long disputes between England and France had already begun, and by a strange anticipation of far later times, they had already begun to be carried on within the boundaries of the Empire. Otto, the son of an English mother, was supported by the money and the arms of his uncle John of England, while the heir of the Hohenstaufen partly owed his advancement to the influence and the gold of Philip of France. In 1210 Frederick was elected King; two years later, Otto, in Mr. Oliphant's words, 'rushed on his doom.' At Bouvines, a name hardly to be written without an unpleasant feeling by any man of Teutonic blood and speech, the King of the French overthrew the Saxon Emperor and his English and Flemish allies. The power of Otto, already crumbling away, was now utterly broken. In 1215, while John was quailing before his triumphant Barons, Frederick, the rival of his nephew, received the Royal Crown and assumed the cross. Three years later the death of Otto removed all traces of opposition to his claims, an event which, by a singular coin-

cidence, was nearly contemporaneous with the birth of one destined to be himself a King, and the beginner of a new stage in the history of the Empire, the famous Rudolf of Hapsburg. In 1220 Frederick's son Henry, then only eight years old, was elected King, a step which seems irregular, as his father was not yet crowned Emperor. But in the course of the same year Frederick received the Imperial diadem at the hands of Pope Honorius. His coronation was an event deserving of special record in the Roman annals, as one of the very few times when an Emperor received his Crown without bloodshed or disturbance, amid the loyal acclamations of the Roman people. Possibly some conscious or unconscious feeling of national kindred spoke in favour of an Emperor born within the borders of Italy, and under whose rule it might seem that Germany, and not Italy, was likely to be the secondary and dependent realm. In truth, in that same year, before leaving his Northern kingdom, Frederick had, seemingly as the price of the election of his son, put the seal to the destruction of the royal power in Germany. The charter which he granted in that year to the German Princes is one of the marked stages of the long process which changed the Kingdom of Charles and Otto and Henry into the lax Confederation which has so lately fallen in pieces before our eyes.

Frederick was still, to all appearance, a dutiful son of the Church; but there were already signs that a storm was brewing. The union between a Pope and a Hohenstaufen Emperor was something which in its own nature could not be lasting. The magnificent theory which looked on the spiritual and temporal chiefs of Rome as the co-equal rulers of the Church and the world always gave way to the slightest strain. Even before his imperial Coronation, Frederick had fallen under the displeasure of Honorius; he had received rebukes and had had to make excuses. As usual, the two swords were always clashing; the King of Sicily was charged with meddling with ecclesiastical fiefs, and with the freedom of ecclesiastical elections. But the great point was the Crusade. Frederick had become a Crusader at the time of his assumption of the German Crown; but no Crusade had he as yet waged. Damietta had been won, and Damietta was soon after lost again, without the temporal head of Christendom striking a blow to win or to defend it. The position thus lightly dealt with was held to be the very key of the Holy Land. In the eyes of a Pope, such neglect was a wicked forsaking of the first of duties. It might perhaps have appeared in the same light in the eyes of an ideal Em-

peror. But the hereditary King of Sicily, the elected King of Germany, Italy, and Burgundy, found occupation enough in the lower duties of ordinary royalty. In all his kingdom there were matters calling for his attention. In his own hereditary realm he had a work to do which he might fairly plead as an excuse for not engaging in warfare beyond the sea. He had no need to go and seek for Saracen enemies in distant lands, while the Saracens of his own island were in open revolt. He brought into subjection both the turbulent Infidels and the no less turbulent Norman nobles, and made Sicily the model of a civilized and legal despotism, framed after the pattern of the best days of the Eastern Empire. The wild Saracens of the mountains were partly constrained to adopt a more peaceful life, partly transferred to a spot where, instead of restless rebels, they became the surest defence of his throne. He planted them in the city of Lucera in Apulia, where, isolated in a surrounding Christian country, they dwelt as his Housecarles or his Janissaries, bound by the single tie of personal loyalty, soldiers who could always be trusted, for over them Popes and monks had no influence. Besides this work in his native kingdom, a work alone enough to tax all the energies of an ordinary mortal, he had other work to do in all his Imperial realms. Not the least interesting among the notices of this part of his reign are those which concern the states along his western frontier. On the one hand France was already encroaching; on the other hand a movement was beginning which, had it prospered, might have placed an unbroken line of independent states between the great rival powers. The duty which Switzerland and Belgium, at too great an interval from one another, had still to discharge, fell, in the thirteenth century, to the lot of a whole crowd of rising commonwealths. From the mouths of the Rhine to the mouths of the Rhone, republics, worthy sisters of the republics of Italy and Northern Germany, were springing up through the whole length of ancient Lotharingia and Burgundy. It is sad to see Frederick everywhere interfering to check this new birth of freedom. Everywhere the local Count or Bishop was encouraged to subdue the presumptuous rebels of the cities. Take two instances from cities widely apart in geographical position. Massalia, the old Ionian commonwealth, the city which has braved the might of Cæsar and which was before many years to brave the might of Charles of Anjou, had begun her second and brief career of freedom. In the eyes of Frederick the citizens were mere rebels against their Bishop, and



the Count of Provence was bidden to bring them back to their due obedience. So, at almost the other end of the Empire, the citizens of Cambray failed to pay due submission to the Imperial commands. But here a more dangerous influence was at work. The Emperor was still on good terms with the King of the French; he had lately concluded a treaty with him, binding himself, among other things, to enter into no alliance with England. But the instinctive tendencies of the Prussian monarchy were then, as ever, too strong for mere written engagements. France was intriguing with the citizens of Cambray, and the Emperor had to call upon King Lewis to cease from any intermeddling with his disaffected subjects.

We have brought out these points, though of no special importance in the life of Frederick, because they at once illustrate the varied relations of a mediæval Emperor to all kinds of rulers and communities, great and small, and because they specially illustrate the reality of power which the Emperor still retained both in his Burgundian kingdom, and in other portions of the Empire which have since been swallowed up by the encroachments of France. Neither of our authors bring out this point as it should be brought out. M. Bréholles is far too learned to be ignorant of, far too candid to suppress, any one fact in his history. Still he is a Frenchman, and we can hardly expect him to enter a formal protest against the most popular of all French delusions. Mr. Oliphant knows his facts, but he does not fully realize them. It is with a kind of surprise that he finds 'that many provinces, now included within the boundaries of France, then looked for direction to Hagenau or Palermo, not to Paris.' To be sure Mr. Bryce's tabular view of the Ten Burgundies had not then been drawn up.

At last we reach Frederick's Crusade, perhaps rather to be called his progress to the East. The marriage of Frederick with Yolande of Brienne put him into altogether a new relation to the Holy Land and all that pertained to it. His journey to Jerusalem was now not that of a private adventurer or pilgrim, not that of an Emperor acting as the common head of Christendom, but that of a King going to take possession of one of his own kingdoms, to receive yet another crown in another of his capitals. And in truth Frederick, when he had once set out, had less difficulty in winning his way to the crown of Jerusalem, than some of his predecessors in the Empire had had in winning their way to the crown of Rome. Everything seemed against him; the Papal throne had a new and very different occupant; to the

mild Honorius had succeeded the stern and unbending Gregory. Frederick's second Empress was already dead, and with her, it might be argued, he had lost his right to a kingdom which he could claim only through her. He himself was excommunicated at every step; if he went, if he stayed, the ban was equally launched against him for going and for staying. Yet he went; on his way he successfully established his Imperial rights over the Frank King of Cyprus, a rival claimant for the crown of Jerusalem. Without striking a blow, by dexterous diplomacy, by taking advantage of the divided and tottering state of the Mahometan powers, he gained the main object for which Christendom had striven in vain for forty years. A Christian King again reigned in the Holy City, and the sepulchre of Christ was again in the hands of His worshippers. It was a strange position when the excommunicated King, in whose presence any religious office was forbidden, placed on his own head the crown of the Holy Land in the church of the Holy Sepulchre. It might almost seem as if it was in this strange moment of trial that Frederick's faith finally gave way. The suspicion of Mahometanism which attached to him is of course, in its literal sense, utterly absurd; but it is worthy of notice that it was not confined to Christian imaginations. The conduct of Frederick at Jerusalem impressed more than one Mahometan writer with the belief that, if the Emperor was not an actual proselyte to Islam, he was at least not sound in the faith which he outwardly professed. It must be remembered that the toleration of Mahometan worship within its walls was one of the conditions on which he obtained possession of the Holy City. A stipulation like this might well arouse suspicions of Frederick's Christian orthodoxy in the minds of Christians and Mussulmans alike. To modern ideas his conduct appears simply just and reasonable; setting aside any theories of religious toleration, the view of a modern statesman would be that Frederick preferred, and wisely preferred, instead of putting everything to the hazard of the sword, to win his main object by treaty, and to yield on some minor points. The essence of a treaty between two powers treating on equal terms is that each should abate somewhat of that which it holds to be the full measure of its rights. Few will now condemn Frederick for choosing to accept such large concessions by treaty rather than to trust everything to the chances of war. Had he done otherwise, he might probably have had to return to Europe after wasting his forces in a struggle as bootless as those of most of the Cru-

saders who had gone before him. And it seems that, even in his own age, a large amount of public European feeling went with him. His treatment at the hands of the Pope and the Papal party was so manifestly unjust as to arouse a deep feeling in his favour in all parts of Christendom. In Italy, in Germany, in England, the chief writers of the time all side with Frederick against Gregory. Allowance was made for his position; he had done what he could; had he not laboured under an unrighteous excommunication, had he not been thwarted and betrayed by the clergy and the military orders, he would have done far more. Still the indignation of the extreme ecclesiastical party against Frederick was, from their own point of view, neither unnatural nor unreasonable. In the eyes of some zealots any treaty with the Infidels was in itself unlawful; even without going this length, a treaty which, though it secured the Holy Sepulchre to the Christian, left the 'Temple of the Lord' to the Mahometan, could not fail to offend some of the most deep-seated feelings of the age. Whatever might be Frederick's own faith, he at least had not the orthodox hatred for men of another faith. Various incidental actions and expressions of the Emperor's during his stay at Jerusalem impressed the Mahometans themselves with the idea that he at least put both religions pretty much upon a level. We must remember that his toleration of Mahometanism would be a thing which few Mahometans would appreciate, and which would of itself raise suspicions in most Oriental minds. A man who could act with justice and moderation towards men of their law would seem to be no really firm believer in the law which he himself professed. But this could not have been all; the impression of Frederick's lack of orthodoxy, and of his special tendency towards Mahometanism, was too deeply fixed in the minds of men of both creeds to have rested on nothing more than an inference of this kind. And it is perfectly credible in itself. A King of Sicily, who from his childhood had had to do with Saracens in his own kingdom both in peace and in war, who, if he had sometimes had to deal with them as enemies, had also found that they could be converted into his bravest and most loyal soldiers, could not possibly hate the unbelievers with the hatred which in the breast of a King of England or France might be a perfectly honest passion. Then, just at the moment when he was naturally stung to the heart by his ill-treatment at the hands of the head of his own faith, when he was denied communion in Christian rites, and when the ministers and defenders of the Christian Church

shrunk from him as from one worse than an infidel—just at such a moment as this, he came across a fuller and more splendid development of the Mahometan law among the independent Mahometan powers of the East. There was much in the aspect of Mahometan society to attract him. The absolute authority of the Mahometan sovereigns was congenial to his political notions. The art and science, such as it was, of the more civilized Mahometan nations appealed to his intellectual cravings. The license allowed by the Mahometan law fell in no less powerfully with the dictates of his voluptuous temperament. That Frederick ever, strictly speaking, became a Mahometan is of course an absurd fable. It is not even necessary to believe that he ever formally threw aside all faith in dogmas of Christianity as understood in his own age. But that Frederick, with all his professions of orthodoxy, was at least a free-thinker, that he indulged in speculations which the orthodoxy of his age condemned, it is hardly possible to doubt. That he aimed at the widest changes in the external fabric of the Christian Church, in the relations between the spiritual and the temporal, between the Papal and the Imperial powers, there can be no doubt at all. And, if there was any one moment of change in Frederick's mind, any one moment when doubt, if not disbelief, obtained the supremacy over his intellect, no moment is so likely as that in which he saw Christianity and Islam ranged side by side in the Holy City of both religions, and when, as regarded himself, it could not have been Christianity which appeared in the more attractive light.

We had hoped to give a sketch, if only a short one, of the main events in Frederick's later career, his reconciliation with Gregory, his season of comparative tranquillity in his Sicilian realm, his schemes of government and legislation, his second and final rupture with Gregory, his last struggle with Innocent, his last excommunication and deposition, and the political consequences of that bold stretch of Papal authority in the appearance of rival Kings in Germany and the general weakening of the Imperial power throughout the Empire. But the reflections to which we have been led by the consideration of Frederick's position at Jerusalem lead us at once to questions which may well occupy the remainder of this article. On the question of Frederick's religion Mr. Oliphant hardly enlarges at all; Dean Milman sums up his own view in a few remarkable words:—

'Frederick's, in my judgment, was neither scornful and godless infidelity, nor certainly a more advanced and enlightened Christianity, yearning after holiness and purity not then

attainable. It was the shattered, dubious, at times trembling faith, at times desperately reckless incredulity, of a man under the burthen of an undeserved excommunication, of which he could not but discern the injustice, but could not quite shake off the terrors; of a man whom a better age of Christianity might not have made religious; whom his own made irreligious.'

But M. Bréholles, both in his general Introduction and in his special monograph of Peter de Vineâ, goes very much deeper into the question. He gathers together a great number of passages from contemporary writers, which, in his judgment, are evidence that Frederick, in the eyes of a small knot of enthusiastic admirers, was looked on as something like the Apostle, or rather the Messiah, of a new religion. Such a notion is certainly much less improbable in itself than, with our modern notions, it seems to us. Everything was then looked at from a religious point of view. Political partisanship took the form of religious worship; the man who died for his country or for his party was canonized as a martyr, and miracles were deemed to be wrought at his grave. The famous case of Simon of Montfort, a younger contemporary of Frederick, is perhaps the strongest of any. Simon died under a Papal excommunication, but no excommunication could hinder the English people, and the mass of the English clergy among them, from looking on the martyred Earl as the patron of the English nation, whose relics possessed healing virtues on earth, and whose intercession could not fail to be availing in heaven. The age of Frederick moreover was eminently an age of religious movement. The new monastic orders on the one hand, the countless heresies on the other, sprang out of the same source, and sometimes mingled together in a strange way. The heretic who was sent to the stake and the Dominican Friar who sent him thither, were, each in his own way, witnesses to a general feeling of dissatisfaction with the existing state of the Church, to a general striving after something new, in dogma, in discipline, or in practice, according to the disposition of each particular reformer. Strange writings, setting forth strange doctrines, were afloat before the days of Frederick and remained afloat after his days. The whole of the inner circle of the Franciscan Order, the Order of personal self-sacrifice and mystic devotion, seemed fast sweeping into something more than heresy. Even the pillars of orthodoxy, the unrelenting avengers of every deviation from the narrow path, the stern, practical, relentless Dominicans, did not escape at least the suspicion of

being touched by the same contagion. That contagion was indeed more than heresy; it was the preaching of a new religion. To the believers in the 'Everlasting Gospel,' Christianity itself seemed, just as it seems to a Mahometan, to be a mere imperfect and temporary dispensation, a mere preparation for something better which was to come. The reign of the Father had passed away with its revelation, the Mosaic Law; the reign of the Son was passing away with its revelation, the Christian Gospel; the reign of the Holy Ghost was approaching, with its own special revelation, more perfect than all. The age was one which could hardly bear to look upon anything in a purely secular way. Even when the spiritual and temporal powers came into conflict, the conflict was of a somewhat different kind from similar conflicts in our own day. The Ghibelin doctrine was far from being a mere assertion of the superiority of a power confessedly of the earth, earthy, over a power confessedly of higher origin. The Empire had its devotees as well as the Papedom. In the ideas of both parties a Vicar of Christ was a necessity; the only question was whether the true Vicar of Christ was to be looked for in the Roman Pontiff or in the Roman Cæsar. To the enthusiastic votaries of the Empire, the Emperor seemed as truly a direct representative of divinity, as literally a power reigning by divine right, as ever the Pope could seem in the eyes of the strongest assertor of ecclesiastical claims. It has been the growth of independent nations and churches which has, more than anything else, dealt the death-blow to both theories. But in Frederick's time no man could be within the limits of the Empire a vehement opponent of the temporal or spiritual claims of the Pope, without in some measure asserting a spiritual as well as a temporal power in the Emperor. This deification of the Imperial power attained perhaps its fullest and most systematic development among the writers who undertook the defence of Lewis of Bavaria; but there is no doubt that ideas of the same kind were already busily at work in the days of Frederick. So far as Frederick was an opponent of the Papal power, so far as he contemplated any transfer of power from the Papacy to the Empire, so far in short as he appeared at all in the character of an ecclesiastical reformer, he could only do so, if not in his own eyes, at least in those of his admirers, by transferring to himself, as Roman Emperor, some portion of that official sanctity of which he proposed to deprive the Roman Pontiff.

Now, perplexing as is the question of Frederick's personal belief, his external po-

sition, as Emperor and King, towards ecclesiastical questions, is intelligible enough. He always in his own person professed strict orthodoxy of dogma, and in his legislation he strictly enforced such orthodoxy within the pale of the Christian Church. To the Jew and the Mahometan he gave complete toleration; the Christian heretic found in him a persecutor as cruel as the most enthusiastic Dominican turned loose upon the victims of the elder Montfort. There is no necessary inconsistency in such a position; it is, in fact, one which was recognised by the general treatment of the Jews throughout the middle ages. The Jew or the Mahometan is something altogether external to the Church. He is a foreign enemy, not an inborn rebel; he is one against whom the Church may rightfully wage war, but not one whom she can claim to bring before her internal judgment-seat. But the heretic is a home-bred traitor; he is not a foreign enemy of the Church, but a native rebel against her; he is therefore an object, not of warfare, but of judicial punishment. A Christian sovereign, then, according to the mediæval theory, is in no way bound to molest Jews or Mahometans simply as Jews or Mahometans; he must secure Christians from any molestation from them, from any proselytism to their creed; but the Jew or Mahometan is not amenable to punishment simply on the ground of his misbelief. But the heretic is so amenable. The Jew has never been under the allegiance of the Church; he is a foreigner, not to be injured unless he commits some national wrong; the heretic has cast off his allegiance to the Church; he is a spiritual rebel to be chastised as unsparingly as the temporal rebel. This principle was acted upon throughout the middle ages. The Jew was often exposed to unfavorable legislation; he was still more commonly visited with illegal or extra-legal oppression; but a Jew, simply as a Jew, was never held to be liable to the penalties of heresy. What is remarkable in Frederick's legislation is the real and effective nature of the toleration which he secures to Jews and Mahometans, combined with the fact that such a man as Frederick should appear as a religious persecutor under any circumstances. If he really handed over heretics to the flames in cold blood, simply to preserve for himself a character for orthodoxy which he did not deserve, it is hardly possible to conceive a greater measure of guilt. And the guilt is hardly less, if he employed the popular prejudice against heresy to destroy political enemies under the garb of heretics. It is possible, however, to explain Frederick's persecutions without attributing to him such

detestable wickedness as this. Though a legislator may be personally a free-thinker, or even a confirmed unbeliever, it does not at all follow that he thinks it either possible or desirable to abolish the public establishment of Christianity in his dominions. And, in the view of most times and places, the public establishment of any religious system has involved the legal punishment of those who separate from it. Frederick might thus hold it to be a matter of public order and public justice to chastise men for publicly rebelling against a system in which he had himself lost all personal faith. Persecution of this sort is far more odious than the persecutions of the honest fanatic, who burns a few men in this world to save many from being burned in the next. Still it does not reach the same measure of guilt as the detestable hypocrisy which at first seems to be the obvious explanation of Frederick's conduct in this respect.

Frederick, then, professed strict orthodoxy of dogma, and persecuted those who departed from such orthodoxy. But it is plain that, as to the relations between the spiritual and temporal powers, he was not orthodox in the Papal sense. It was hardly possible that an Emperor should be so. In the ideal theory of the two powers, the Pope and the Emperor are strictly co-equal; the authority of each is alike divine within its own range. But rigidly to define the range of each is so hard a matter, that this ideal theory could hardly fail to remain an ideal theory. The practical question always was whether the Emperor should be subject to the Pope or the Pope subject to the Emperor. On this question we cannot doubt that Frederick had a very decided judgment indeed. With such an intellect as his, in such a position as his, the subjection of the Pope to the Emperor would be an established principle from the first moment that he was capable of speculating about such matters at all. Every event of his life, every excommunication pronounced by a Pope, every act of hostility or treachery on the part of churchmen or military monks, would tend to confirm his decision. How far Frederick, the innovator, the revolutionist, the despiser of received beliefs, may have been influenced by the traditional theories of the Holy Roman Empire, is another matter. It is possible that he employed them as useful for his purpose, without that honest faith in them which clearly moved the Ottos and his own grandfather. The magnificent theory of the Empire may well have kindled his imagination, and he may have consciously striven to change that magnificent theory into a living reality. But the dominion at which he aim-

ed was the immediate effective dominion of a Byzantine Emperor or a Saracen Sultan, rather than the shadowy lordship of a world, every inch of which was partitioned out among kings and commonwealths which were practically independent. But, whether strictly as Emperor or in any other character, there can be no doubt that Frederick gradually came to set before himself, as the main object of his life, the depression of the spiritual, and the exaltation of the temporal, power.

As we observed before, whatever might have been Frederick's own secret views, such a transfer of power as this could, in that age, hardly take any acknowledged outward shape, except that of a further deification of the temporal power, a more complete recognition of the Emperor, and not the Pope, as the true Vicar of Christ upon earth. We must also remember the tendencies and ways of expression of that age, how every thought took a religious direction, and how, exactly as among the Puritans of the seventeenth century, every strong emotion instinctively clothed itself in scriptural language. Every one who knows anything of the literature of those times is familiar with the way in which the thoughts and words of Scripture are habitually applied by men to their own public or private affairs, applied in the most perfect good faith, but in a tone which to our habits seems irreverent, and sometimes almost blasphemous. We are thus prepared to find devoted partisans of Frederick investing him with a religious character, and lavishing upon him the most sacred language of prophets and apostles. Again, the Christian Emperors had all along retained from their pagan predecessors several official phrases borrowed from the old heathenism. The Emperor and all that belongs to him was 'divine' and 'sacred;' his rescripts were 'oracles;' his parents and his children were spoken of as if they belonged to a stock superior to humanity. Between these two influences we are not surprised to find Frederick spoken of in terms which, with modern feelings, we should apply only to the holiest of objects. The question now comes, — Was Frederick ever directly and seriously put forth by himself or by his followers as the prophet, apostle, or Messiah of a new religion?

That he was so put forth seems to be the opinion of M. Bréholles, and we must wind up by a glance at the evidence on which he founds his belief. He would hardly rely with any great confidence on two or three scoffing speeches attributed to Frederick himself, which may or not have been really uttered by him, but which in any case illus-

trate the conception which men in general formed of him. Thus, as is well known, he was commonly believed to have said that Jews, Christians, and Saracens had been led away by three impostors, Moses, Jesus, and Mahomet, and that he, Frederick, would set up a better religion than any of them. If such a speech was ever made, it could only have been in mockery, and it would convict Frederick of utter contempt for all religion, rather than of any serious scheme for setting up a religion of his own. The real stress of the argument lies on the meaning to be put on certain passages in which contemporary partisans of Frederick speak of him in language which undoubtedly, at first sight, has a very extraordinary sound. It is not wonderful in an age when every name was played upon and made the subject of mystical explanations, that the fact that Frederick's great minister bore the name of Peter should have been made the subject of endless allusions. The parallel between Simon Peter and his master and Peter de Vineá and his master shocks the taste of our times, but it was thoroughly in the taste of the thirteenth century. Peter is to go on the water to his master; he is converted, and is to strengthen his brethren; his master has committed to him the trust to feed his sheep and to bear the keys of his kingdom. All these and other expressions of the same sort are found in the original documents collected by M. Bréholles. So we find Frederick hailed as a saint, — 'Vivat, vivat Sancti Friderici nomen in populo.' We find Frederick himself, in one and the same passage, applying to his mother the old title of pagan divinity, and speaking of his birthplace in a way which implies a parallel between himself and Christ. Constance is 'diva mater nostra,' and Jesi is 'Bethleem nostra.' But here is one passage which perhaps surpasses all. This is found in a letter from a Sicilian Bishop to Peter de Vineá, a letter which is by no means easy to understand by reason of the figurative language used throughout, but in which there is a direct parallel of the most daring kind between Christ and Frederick. After an allusion, brought in in a strange way, to the Last Supper and the rite then instituted, the writer goes on thus —

'Unde non immerito me movet hæc externa relatio, quod Petrus, in cujus petrâ fundatur Imperialis Ecclesia, quum augustalis animus roboratur in cœnâ cum discipulis, tale certum potuit edixisse.'

The language here is what we should nowadays call blasphemous; but it is really only the habit of scriptural application pushed to its extreme point. We should

also remember that Frederick and his partisans, against whom so much Scripture had been quoted, would have a certain pleasure in showing that they could quote Scripture back again, as certainly no one ever did with more vigorous effect than Frederick himself at some stages of his controversy with Gregory. But we do not see in this or in the other passages quoted, enough to justify some of the expressions used by M. Bréholles. Such we mean as when he says,—

‘*Ecrivant aux cardinaux durant la vacance du saint-siège, en 1243, il leur rappelle l'exemple des Israélites, qui, errant sans chef dans le désert pendant quarante jours, en vinrent à prendre un veau d'or pour leur dieu: "S'il faut renoncer à la consécration d'un nouveau pape, ajoute-t-il, qu'un autre saint des saints paraisse enfin, mais quel sera-t-il?" [Si papalis cessavit unctio, veniet ergo alius sanctus sanctorum, et quis illo est?] Lui-même apparemment, puisqu'il aspire au rôle de prophète et de Messie: et sur ce point les contemporains ne se trompaient guère quand ils accusaient Frédéric de chercher à usurper pour son propre compte le souverain pontificat. Delà à se déclarer d'une essence presque divine, il n'y a qu'un pas.*'

M. Bréholles here quotes the passages in which Frederick calls his son ‘*Cæsarei sanguinis divina proles*,’ and speaks of his mother and his birthplace in the way in which we have already spoken. Elsewhere he says—

‘*Ainsi Frédéric II. semble bien, de son vivant, adoré et divinisé à peu près comme une émanation de l'Esprit-Saint. Dans les termes qui servent à exprimer sa suprématie religieuse, il y a quelque chose qui tient à la fois du paganisme de l'Orient, qui rappelle le culte personnel imposé à leurs sujets par les empereurs de l'ancienne Rome et par les califes fatimites de l'Egypte.*’ \*

Surely this language is stronger than the passages quoted will bear out. To us it seems that the actual designs of Frederick were not unlike those of Henry the Eighth. We forego any comparison between the two men, than whom few can be more unlike. Henry was at least a firm believer in his own theological system. Frederick, we cannot help thinking, looked on all theological systems as mere political instruments. But the immediate object of each was the same, to bring the spiritual power under the control of the temporal, to transfer to the King the ecclesiastical supremacy of the Pope. Within his own Kingdom of Sicily the position of Frederick must have been identical with the position of Henry. If he could do no more, he could at least be both Pope and

King in his own realm. But, as Emperor, he must have at least dreamed of a far wider supremacy, even if he gave up any attempt to obtain it as impracticable. The Emperor, Lord of the World, might dream of establishing a spiritual as well as a temporal supremacy over all the realms which were in theory placed behind his superiority. He might deem it really possible to establish such a superiority within those realms which still retained some measure of connexion with the Empire. The result would have been the subjection of Western Europe, or, at all events, of three of its most important portions, to the deadening yoke of a Caliphate.

Our remarks have been desultory and imperfect. Such a subject as the life and objects of Frederick the Second might furnish material for volumes. We can profess to do little more than to call attention to some of the most wonderful chapters of European history, and to point to the collection of M. Bréholles as one of the most wonderful treasure-houses of original materials with which any scholar has ever enriched historical learning.

#### ART. V.—PROFESSOR CONINGTON'S *ÆNEID*.

PROFESSOR NEWMAN informed us, in the course of his controversy with Professor Arnold, that at least one artisan was eager to complete his acquaintance with the *Iliad*, through the medium of his own vigorous though eccentric version; but in spite of this weighty testimony, we are inclined to believe that the revived taste for translation prevails more strongly among writers than among readers. Hitherto we can detect no signs of the wide-spread eagerness, which existed in Dryden's time, to naturalize the masterpieces of classic poets in the literature of England. Perhaps experience has shown that the expectation was chimerical. People generally open a translation now in the hope of some unexciting pastime from comparing an original, which they admire, with a copy which they are not prepared to despise. Translators, we imagine, must often be attracted by the feeling which made the revision of Dryden's ‘*Plutarch*’ one of the pleasantest labours of Clough's life; the feeling that in translating nobody incurs the intellectual or moral responsibility of propounding inadequate solutions of important questions as true; for, in the first place, no translation claims to be final; in the second place, if it did, it would do little harm. Everybody sees that the Irish schoolmistress was only reasonable when she said, ‘*Ah! niver mind the long words, Norah darlint; shure they're*

\* Was there any Caliph, except Hakem, who imposed on his subjects anything which could be strictly called ‘culte personnel’?



only the names of foreign countries; and, place the Saints, ye'll niver be in any of them.' And translators are entitled to the same indulgence as Norah; the refinements which they miss, or else preserve imperfectly, are only the livery of an extinct civilisation.

If the thankless labours of translators are too frequently received with indulgence akin to contempt, that only increases our admiration for Professor Conington's courage, no less than for the industry, which has embodied a scholarly commentary in a readable poem. It would be ungracious to reproduce Dr. Johnson's wonderment about the dancing-bear; for, though we are honestly surprised that it should be possible to express any views on the meaning of the *Æneid* in an imitation of 'The Lord of the Isles,' we are still more surprised to see Professor Conington's views expressed in such a successful imitation.

It is a very great feat to produce an English version of the *Æneid*, which is not harder reading to English scholars than the Latin original,—which is accessible to all English readers whose powers of attention are not exhausted by the 'Bride of Abydos,' and the 'Idylls of the King.' And if, after all, Professor Conington has failed to produce an adequate rendering of Virgil's *chef-d'œuvre*, 'Magnis tamen excidit ausis;' if his work must one day be relegated to the twilight immortality of literary historians, he can supply his own consolation—

Κάτθανε καὶ Πάτροκλος, ὃ περ σέο πολλὸν ἀμείνων.

It is pleasant and reasonable to begin by dwelling on the favourable impression which a long work gives as a whole; it is doubly reasonable when the long work is a translation. The best of translators can only equal his original; he can scarcely ever surpass him. Often it is his praise—it is very often the praise of Mr. Conington—to reproduce the general effect of the original without a single dazzling felicity. Even if it were possible to marshal in uniform array his successes and the failings of his predecessors, the public would have a right to find the procession monotonous, to be 'tired of always hearing' Aristides 'called the Just.' Hence any detailed criticism is necessarily more concerned with faults than beauties. And it is worth while to mention this in passing, lest we should be suspected of any invidious purpose, in a somewhat one-sided catalogue of more or less microscopical defects.

For, after all, these minutiae are the only things that can be ascertained; the general reader is a better judge than the critic of

the vague but interesting question, how many faults, where faults of *some* kind are inevitable, a translator like Mr. Conington has strength to support; how many cut flowers might be expected to wither without relieving the cultivated barrenness of Pitt's version of the *Æneid*.

There is one point, however, going deep into the whole life of the *Æneid*, which must be discussed before we can enter into this detailed examination; we mean the metre selected by Mr. Conington; and we naturally turn to his Preface to learn the reason for what seems a paradoxical choice. He tells us (page 9) that he does not regard his 'measure as the one true equivalent of the Virginian hexameter, and that probably a better case could be made out both for heroic blank verse and the heroic couplet; the *ottava rima* of Tasso,' he thinks, 'might represent the general impression, though not the effect of particular lines;' but according to him, 'the question is not so much what is absolutely best, as what is best for the individual translator.' We do not care to dispute a theory which was held by the late Mr. Worsley, and secured us his charming version of the *Odyssey*, instead of a dreary exercise in hexameters, which would only have made their rhythm felt by sacrificing variety; we are ready to believe on his authority, supported by Mr. Conington's, that blank verse deserving the name is only possible to one or two writers in a generation. But although Mr. Worsley has caught the tune of Spenser's minstrels far more successfully than Lord Derby or even Cowper has echoed the organ tones of Milton, we are inclined to doubt whether the superiority of Mr. Conington's success in imitating Scott is proportioned to the inferiority of his model. That model has been followed very closely, though by no means servilely, so that we are half surprised that the heroic couplet should have been discarded to avoid rivalry with Dryden, by a translator who seems to have courted rivalry with Scott. The one insuperable objection to any regular stanza is stated with singular moderation, when we are told that it has trammels which would be more sensibly felt in attempting to deal with Virgil's complicated paragraphs, than in endeavouring to reproduce the less highly organized structure of Homer's narrative.

It is curious that no translator seems to have asked himself, why the freedom in distributing the intervals of rhyme, which is possible to Scott in dealing with the ballad metre, should be impossible in dealing with the heroic metre. Perhaps the metre we have suggested may be destined

to wait, with the English hexameter, in the limbo of impracticability, till fished out by an original poet. It is certain that, however the decasyllabic line be manipulated, it is likely, from the want of really short syllables, to be very much less varied and accented than the hexameter, as written by Virgil; in the ballad metre, as written by Scott, it is possible to vary the pauses by changing the length of line, and to emphasize them by the use of rhyme. But Mr. Conington seems to show a very imperfect appreciation of the powers of his chosen instrument. The anapaestic movement of the 'Lay of the Last Minstrel' may be beneath the dignity of Virgil, and the same cause may make 'Harold the Dauntless' read like a burlesque, though this is only to be expected when an author executes an anonymous parody on his own writings; but for all that, the metre of the greater part of 'The Lord of the Isles,' and of the first half, at any rate, of Mr. Conington's *Æneid*, is less accented and more monotonous than any recognised metre in the language. It is rapid, and that is almost its only merit; it is less fatiguing to watch it slipping by, with easy slipshod gait, than to follow Pope's imitators in their eternal tiresome minuet. But it is in no sense an equivalent for the music of Virgil; the greater part of the *Æneid* is raised above prose, chiefly by the uniform ease and grace with which an elaborate metre is controlled;—the parallel passages in Mr. Conington's version are raised above prose, by his efforts to surmount the difficulties of the easiest of English metres. One might say that Virgil dances swiftly forward, swaying to and fro as he circles in a mazy measure, while his poor translators lash themselves to keep pace with him, and run races among themselves for the honor of not being last. Very often Mr. Conington wins, but that is because he gives up all pretence of keeping step. Take the opening lines, which are characteristic both in Virgil and in Conington:—

'Arms and the man I sing, who first  
By Fate of Ilian realm amerced,  
To fair Italia onward bore,  
And landed on Lavinium's shore,—  
Long tossing earth and ocean o'er,  
By violence of heaven, to sate  
Fell Juno's unforgetting hate:  
Much laboured too in battle-field,  
Striving his city's walls to build,  
And give his Gods a home;  
Thence comes the hardy Latin brood,  
The ancient sires of Alba's blood,  
And lofty-rampired Rome.

'Say, Muse, for godhead how disdained,

Or wherefore wroth, Heaven's queen con-  
strained

That soul of piety so long  
To turn the wheel, to cope with wrong.  
Can heavenly natures nourish hate  
So fierce, so blindly passionate?'

It would be too much to expect a translator to be as successful as Virgil, in making the minor metrical pauses coincide with the chief grammatical pauses, though the feat is not impossible in English, as any one may see who cares to examine 'Paradise Lost,' or 'Gebir,' where Landor seems to have been ambitious of treating Virgil, as Persius had treated Horace,—compressing and refining him into a quintessence of delicate obscurity. But when we have once conceded the principle, that nearly every clause of Virgil is to be thrown into a separate line, one wishes the lines to be as various as possible, for scarcely a single clause in Virgil is thrown into the same metrical form. Alas! Mr. Conington is inexorable; he boils down the complexity of Virgil to one mess of inorganic consistency, and then lets it trickle out in a stream of featureless, though transparent jelly; till we are inclined to think that it would have been less unmerciful to cut Virgil up into lengths of eight lines, if only each length might have had a coherence and system of its own.

It increases our regret, that we can point to several passages where Professor Conington has certainly succeeded in reproducing the metrical effect of the original. For instance, we may cite his translation of *Æneid* vi. 264-281:—

'Eternal Powers, whose sway controls  
The empire of departed souls,  
Ye too, throughout whose wide domain:  
Black Night and grisly Silence reign,  
Hoar Chaos, awful Phlegethon,  
What ear has heard let tongue make known:  
Vouchsafe your sanction, nor forbid  
To utter things in darkness hid.

'Along the illimitable shade  
Darkling and lone their way they made,  
Through the vast kingdom of the dead,  
An empty void, though tenanted:  
So travellers in a forest move  
With but the uncertain moon above,  
Beneath her niggard light,  
When Jupiter has hid from view  
The heaven, and Nature's every hue  
Is lost in blinding night.

'At Orcus' portals hold their lair  
Wild Sorrow and avenging Care;  
And pale Diseases cluster there,  
And pleasureless Decay.  
Foul Penury, and Fears that kill,  
And Hunger, counsellor of ill,  
A ghastly presence they:

Suffering and Death the threshold keep,  
 And with them Death's blood-brother, Sleep:  
 Ill joys with their seducing spells  
     And deadly War are at the door;  
 The Furies couch in iron cells,  
 And Discord maddens and rebels;  
     Her snake-locks hiss, her wreaths drip  
     gora.'

Now let us hear Dryden, for neither Pitt nor Symmons is worth hearing, as the first is laboured and dull, and the second colourless, though manly:—

'Ye realms, yet unreveal'd to human sight,  
 Ye gods, who rule the regions of the night,  
 Ye gliding ghosts, permit me to relate  
 The mystic wonders of your silent state.

Obscure they went through dreary shades,  
     that led

Along the waste dominions of the dead:  
 Thns wander travellers in woods by night,  
 When Jove in dusky clouds involves the skies,  
 And the faint crescent shoots by fits before  
     their eyes,  
 By the moon's doubtful and malignant light.

Just in the gate, and in the jaws of Hell,  
 Revengeful Cares and sullen Sorrows dwell;  
 And pale Diseases, and repining Age;  
 Wan Fear, and Famine's unresisted rage:  
 Here Toils, and Death, and Death's half-brother,  
     Sleep,

Forms terrible to view, their centry keep:  
 With anxious Pleasures of a guilty mind,  
 Deep Frauds before, and open Force behind:  
 The Furies' iron beds, and Strife that shakes  
 Her hissing tresses, and unfolds her snakes.'

In comparing these versions, we feel at a loss to decide by any standard, except the fashion of the day. Professor Conington is more accurate and varied, Dryden is more sustained and vigorous. True, he is careless here and there, suppressing entirely 'et rebus nox abstulit atra colorem,' and permitting himself to write 'revengeful,' when 'avenging' would have been as easy, and every way preferable. But he is substantially faithful, and where he drops a feature in one place, he is careful to reproduce it in another; he cannot express that the regions of the night are silent, so he reminds us that the state of the dead is silent,—the shades are dreary, because the halls of Dis are empty, as his empire is void. Toils and Death, and other evils keep their sentry, instead of 'dwelling' as in Virgil, because Revengeful Cares and sullen Sorrows were reduced to 'dwell' in a former line, instead of being allowed to set their couch or hold their lair as in Virgil or Conington.

On the other hand, 'Famine's unresisted rage' is one of those wretched expressions which would never have got a footing in our language if the men who elaborated the heroic couplet had not undertaken long trans-

lations with a very imperfect instrument. It would be an insult to Mr. Conington and our readers to point out the superiority of 'Hunger, counsellor of ill,' which is as perfect as anything in another language can be. But Dryden's rendering of 'Vestibulum ante ipsum primisque in faucibus Orci,' comes far nearer to the horror and energy of the original, though even he does not suggest with sufficient emphasis that, horrible as hell's jaws are, there is worse behind. 'The threshold keep' reads like a washed-out and unconscious reminiscence of Dryden's 'their centry keep' with the further disadvantage, that it is a needless offence against the parsimony of predicates, which is one of the characteristics and beauties of classical poetry. Again, 'blood-brother' would be questionable English, even if it were not an exaggerated translation of 'consanguineus,' which Dryden renders very easily and happily. 'Seducing spells' is too modern. It is an abstraction with too long a history, appealing to the associations of a civilisation which has passed through the mediæval notions of witchcraft, and left them behind. 'Iron cells' is an unfortunate translation of 'ferrei thalami;' it suggests raging maniacs, or nuns of a flagellant order, while Virgil suggests a piquant contrast, by choosing a word, which in another context would call up associations of delicacy and refinement. Again, 'Discordia demens' is related to Mr. Conington's version, as a bas-relief is to a painting; and the same tendency to heighten the tone runs through the version. Virgil says, 'like the road in the wood by a doubtful moon,' Conington,

'So travellers in a forest move,  
     With but the uncertain moon above,'

which shows that Mr. Tennyson has not yet weaned him from the corrupt tradition that every syllable, which ends in *ove*, may rhyme with every other. Virgil is content to talk about Sorrow and Fear; Mr. Conington will have nothing to do with Sorrow which is not wild, or with Fears which do not kill. For the same reason, we suppose, he tells us that Chaos is hoary, and Phlegethon awful.

After so much hyper-criticism, it is only fair to give Mr. Conington his revenge, by offering a version of our own:—

'Gods of the under world, and silent Ghosts,  
 And Styx and Chaos where wide Night is still,  
 I tell the tale I heard; vouchsafe your will  
 That I may bring earth's hidden things to day,  
 And what is sunken under the dark coasts.  
 They went through shadowy solitary night,  
 And Pluto's blank domains and empty halls—  
 As travellers whom the moon's unkindly light  
 Baffles in forests on a darkling way;

When heaven's face gathers shade and deep  
night falls,

Turning the colour of the world to grey.  
Hard at the threshold, on the skirts of Hell,  
Woe and avenging Cares sit sentinel;  
And pale Diseases dwell, and sad Old Age,  
And shameful Want, and Awe and Famine fell,  
And Toil and Death, all presences of fear,  
And Slumber kin to Death, and Joys of sin,  
Fronting War's deadly house; and next within  
The Furies' iron bower, and Strife and Rage  
With gory fillets twined in snake hair.'

Mr. Conington seems to have been aware that Scott was a more satisfactory model for metre than for language; and we are inclined to believe that he himself has succeeded better in his diction than in his versification. He has not succeeded perfectly. Virgil's diction has been elaborated through successive stages of one continuous process. Professor Conington's diction is often comparatively rude, but it bears traces of a much longer and more varied history, and of the action and re-action of opposite influences.

Still much is to be said for a long translation, written in English of almost uniform ease and purity, in both which merits we are disposed to think Mr. Conington superior even to Dryden, though he falls below him in idiomatic vigour, while both leave not only Pitt, but even Symmons out of sight.

It is true we meet not unfrequently with traces of want of dexterity, such as—

'By fate of Ilian realm amereed,'—

which can only differ from such an inversion as,

'Soon as the wildered child saw he,'

in not being primitive, though it is certainly a 'peculiarity inconsistent with high finish' (Preface, p. xi.), and we almost think mistaken in sense; and we are sorry to hear that *Æneas* is destined

'Fierce war in Italy to wage  
And quell her people's patriot rage.'

But the sound of rage is too useful for its sense to be remembered in verse, while its meaning is unfortunately still preserved in prose.

Soon after we find that he

'Shall give his veterans worn with strife  
A city and a peaceful life,  
Till summers three have seen him reign,  
Three winters crowned the dire campaign.'

Here the translation is certainly harder to understand than the original, and even after turning to the refreshing simplicity of

'Ternaque transierint Rutulis hiberna subactis,'  
though we see what 'crowned' must be made

to mean, it is difficult to explain how it comes to bear that meaning.

Then there are pieces of unfortunate eclecticism, like

'Nor failed a brother's eye to read  
*Junonian* rancour in the deed;'

where the mechanical metaphor in the first line is more like Scott than Virgil, and '*Junonian rancour*' in the second is more like Mr. Conington than either.

Or,

'Where Dardan swains before the king  
With clamorous demonstration bring,

where 'swains' is in the style of Pope, and 'clamorous demonstration' in the style of Grote.

Then we really cannot agree with Mr. Conington, that the eighteenth-century use of 'fair' is a thing that men should not willingly let die; and like most imitators, he seems to have rather exaggerated the features of his original.

'Priam's *eldest fair*.'

Or,

'She clings, she cleaves, she makes him lie  
Lapped in her breast, nor knows *lost fair*,  
How dire a god sits heavy there,'

seem to us a touch beyond Pope or Waller, who, unless we are mistaken, thought an article at least was necessary to turn an adjective into a substantive.

Again, does Mr. Conington really think

'Careened the vessels glide'

a graceful translation of '*Labitur uncta vadis abies*'? Of course the vessels must have been careened at some time in order to deserve the epithet '*uncta*,' but the explanation is tasteless and misplaced; and when we have

'Some launch the vessels, some careen,'

as a translation of '*natat uncta carina*,' the explanation is not only intrusive, but positively misleading; nobody had time to careen the vessel then, though they probably were careened when drawn up for the first time after the storm.

It is due to Mr. Conington to say that he very seldom misrepresents his author so completely; the only other instance we can recall is the rendering of

'Quid struat his cæptis, quam, si Fortuna  
sequatur,

Eventum pugnae cupiat manifestius ipsi,  
Quam Turno regi aut regi apparere Latino.'

'What prize he seeks from war, what end,  
Should fortune smile, his hopes intend,  
King Diomed may fittier scan  
Than Turnus or Latinus can.'

There may be some doubt as to whether 'ipsi' refers to Æneas or Diomed, but there can be no doubt that whoever is meant is contrasted as a *parvenu* with the ancient dignity of King Turnus and King Latinus, whose titles are transferred to Diomed by Mr. Conington.

Perhaps even there he offends of *malice prepense*, as when 'Sensit enim nimia cæde atque cupidine ferri' is rendered

'When Nisus marks the excess of zeal  
The maddening fever of the steel,'

or 'a monument of pure Marpesian grain' is substituted for 'a hard rock or a Marpesian cliff' as a parallel to the immobility of Dido in the shades.

Or again, where, from a passion for incorporating a commentary in a translation,

'Hoc sibi pulera suum ferri Proserpina munus,  
Instituit,'

becomes

'For so has Proserpine decreed  
That this should be her beauty's meed.'

Of course Proserpine was beautiful, and so was the bough, and she was glad to receive it in the gloom of Hades, but that does not prove that the bough was the price of her beauty.

The same tendency sometimes to explanation, sometimes to antithesis, runs through the whole of the translation. For instance, Hecuba tells her husband in Virgil,

'Non tali auxilio nec defensoribus istis,  
Tempus egot;'

in Conington,

'Times so dire,  
Bent knees, not lifted arms require,'

and again bids him, with very little encouragement from Virgil,

'Learn at length  
The secret of an old man's strength.'

When Dido tells Æneas she wishes for a son

'Qui te tamen ore referrit,'

Mr. Conington suggests the reason,

'The sire had cheered me in the son.'

Every one of these are slight things individually, but they are far from standing alone. In the same spirit, when Virgil is content to say that a temple was of marble, his translator tells us that it was 'of marble's purest grain,' though nobody would talk of pure grain of marble unless for want of a rhyme to 'fane.' When he is content to

speak of the Latin race and the Alban fathers, his translator informs us, at the expense of a doubtful rhyme, that the Latin brood was hardy, and the sires of Alban blood were ancient.

*Pecca fortiter* is a bad motto for a Christian, but a good motto for a translator. Dryden is not unlike Virgil when he says—

'From whence the race of Alban fathers come,  
And the long glories of imperial Rome;'

but both Virgil and Dryden had some confidence in their inspiration and their subject.

Again, where Virgil hints at a metaphor in one word, Mr. Conington constantly completes it, leaning to that side of English which is least akin to Latin, especially to Virgil's Latin. Thus, to take our instances from the first three pages only, we have 'volvère casus' rendered 'So long to turn the wheel,' which is scarcely intelligible; 'sic volvère Parcas,' 'the web of fate was woven so;'; 'æternum servans sub pectore vulnus,' 'Feeding evermore the vulture at her bosom's core;'; and 'studisque asperima belli,' 'Hardened in war's sternest school.'

There is a spiritual vagueness and freshness in Virgil that we miss in *all* his translators. Thus, Virgil describing the refuge of Æneas' squadron after the storm, begins, 'There is a place where the sea goes far back,' keeping to the primitive intuition. Mr. Conington, like the rest, goes straight to the inference founded on experience, and begins—

'Deep in a bay an island makes  
A haven by its jutting sides.'

Where Virgil says—

'Hoc visum nulli non ipsi effata sorori,'

Professor Conington explains—

'Not even into her sister's ear  
She dared to breathe that tale of fear.'

But all the other translators dilute the line into a couplet. Occasionally, too, the metre is an obstacle to terseness and fidelity, when we have

'Tantæne animis celestibus iræ'

turned into

'Can heavenly natures nourish hate  
So fierce, so blindly passionate?'

where the last rather mawkish line is obviously intended to rhyme with 'hate,' rather than to caricature *tantæ*; while Symmons is neat, if not satisfactory—

'Ah, can such passions goad celestial wills?'

For the same reason

'I dread the Grecians even when they give'  
is a better rendering of 'Timeo Danaos et  
dona ferentes' than

'Whate'er it be, the Greek I fear,  
Though presents in his hand he bear.'

We certainly should not have expected any  
of Virgil's minute touches, which had been  
preserved in Dryden, would have been  
effaced by Mr. Conington; but such is too  
often the case. Dryden keeps 'the groans  
of men' at the funeral of Marcellus, which  
Mr. Conington reduces to 'a groan from  
Mars' plain.' Dryden tells us that Pallas  
*presumed* to hurl the fire of Jove, while  
Mr. Conington effaces the emphatic 'ipsa'  
from the complaint of Juno.

In Dryden, after the supplication of  
Venus—

'The Father of immortal race  
Smiling with that serene indulgent face,  
With which he drives the clouds and clears the  
skies,  
First gave a *holy kiss*, then thus replies:'

In Mr. Conington—

'With that *refulgence* in his eye  
Which soothes the *humours* of the sky,  
Jove on his daughter's lips impressed  
A gracious kiss, then thus addressed.'

Dryden gives the forec of 'Oscula libavit  
natæ,' where 'natæ,' from its position, must  
be emphatic, in one trial; Mr. Conington  
misses it in two. Indeed, he is not fortunate  
in his mythology. All his deities seem to  
move about in undress. Jupiter, instead of  
being a good-natured dignified *roi-faînant*,  
like the Arthur or Charlemagne of later  
legend, sinks into a pompous prosy old gen-  
tleman in dressing-gown and slippers, who,  
not content with offering to be communi-  
cative, as in Virgil, actually promises to be  
veracious to his own daughter.

We had strong thoughts of inflicting the  
whole of his tediousness on our readers, in  
the spirit of Dogberry, but we forbear, and  
spare them everything except the concluding  
description of the demon imprisoned in the  
close temple of War, as the lines which we  
have italicized are decidedly superior to the  
original; and though they make the descrip-  
tion too long for dramatic propriety, that is  
no fault in a translation of Virgil, who  
never deprives any speaker of any oppor-  
tunity of saying a fine thing:—

'Within unnatural Rage confined,  
Fast bound with manacles behind,  
*His dark head pillowed on a heap  
Of clanking armour, not in sleep,*  
Shall gnash his savage teeth, and roar  
From lips incarnadined with gore.'

After so much minute criticism, it will be

a relief to ourselves and our readers to turn  
to some more extended specimens of the way  
in which Mr. Conington has represented  
those parts of the *Æneid* on which the fame  
of Virgil chiefly rests. The Second Book  
opens rather tamely:—

'Each eye was fixed, each lip compressed,  
When thus began the heroic guest:

"Too cruel, lady, is the pain,

You bid me thus revive again;

How lofty Ilium's throne august

Was laid by Greece in piteous dust,

The woes I saw with these sad eyes,

The deeds whereof large part was mine:"'

where the archaism in the seventh line seems  
rather frigid. To the best of our recollec-  
tion, Virgil uses *his* archaisms to relieve  
colourless narrative, not to check the current  
of impetuous speech. When he actually be-  
gins his story, *Æneas* improves—

'Worn down by wars,  
Long beating 'gainst Fate's dungeon-bars

As year kept chasing year,

The Danaan chiefs, with cunning given

By Pallas, mountain-high to heaven

A giant horse uprear,

And with compacted beams of pine

The texture of its ribs entwine.

A vow for their return they feign—

So runs the tale, and spreads amain.

There in the monster's cavernous side

*Huge frames of chosen chiefs* they hide,

And steel-clad soldiery finds room

Within that death-producing womb.'

The Latinism which we have italicized is  
not very happy in itself, and might suggest  
packing-cases full of chiefs to an ignorant  
reader.

We pass to the first introduction of  
Laocoon:—

'Girt with a throng of Ilium's sons'

(we have 'Ilium's sight' on the preceding  
page)

'Down from the tower Laocoon runs,  
And, "wretched countrymen," he cries,  
"What monstrous madness blinds your eyes?  
Think you your enemies removed?"

Come presents without wrong  
From Danaans? have you thus approved

Ulysses, known so long?

Perchance—who knows?—these planks of deal

A Grecian ambuscade conceal,

Or 'tis a pile to o'erlook the town,

And pour from high invaders down,

Or fraud lurks somewhere to destroy;

Mistrust, mistrust it, men of Troy!

Whate'er it be, a Greek I fear,

Though presents in his hand he bear."

He spoke, and with his arm's full force

Straight at the belly of the horse

His mighty spear he cast:

Quivering it stood: the sharp rebound

Shook the huge monster: and a sound



Through all its caverns passed,  
And then, had fate our weal designed,  
Nor given us a perverted mind,  
Then had he moved us to deface  
The Greeks' accursed lurking-place,  
And Troy had been abiding still,  
And Priam's tower yet crowned the hill.'

Nobody can deny that this is a good translation, though we cannot get over the planks, and there is a romantic and picturesque touch in the last line which we scarcely like; the magic of the Border is at work, and it is the first stage of the transformation of Priam into a moss-trooper.

After all, we turn with satisfaction, not only to Virgil, but to Dryden, whose superiority, in both dignity and power, more than compensates for his comparative want of finish:—

'Laocoon, followed by a numerous crowd,  
Ran from the fort; and cry'd, from far, aloud :  
"O wretched countrymen! what fury reigns?  
What more than madness has possess'd your  
brains?

Think you the Grecians from your coasts are  
gone,

And are Ulysses' arts no better known?  
This hollow fabric either must enclose,  
Within its blind recess, our secret foes;  
Or 'tis an engine rais'd above the town,  
T' o'erlook the walls, and then to batter down.  
Somewhat is sure design'd; by fraud or force;  
Trust not their presents, nor admit the horse."  
Thus having said, against the steed he threw  
His forceful spear, which, hissing as it flew,  
Pierc'd through the yielding planks of jointed  
wood,

And trembling in the hollow belly stood.  
The sides transpierc'd return a rattling sound,  
And groans of Greeks enclos'd come issuing  
through the wound.

And had not heaven the fall of Troy designed,  
Or had not men been fated to be blind,  
Enough was said and done t' inspire a better  
mind:

Then had our lances pierc'd the treacherous  
wood,

And Ilian towers and Priam's empire stood.'

The second part of the episode of Laocoon is a more favourable specimen of Mr. Conington, and the powers of his chosen metre:—

'But ghastlier portents lay behind,  
Our unprophetic souls to blind.  
Laocoon, named as Neptune's priest,  
Was offering up the victim beast,  
When lo! from Tenedos—I quail,  
E'en now, at telling of the tale—  
Two monstrous serpents stem the tide,  
And shoreward through the stillness glide.  
Amid the waves they rear their breasts,  
And toss on high their sanguine crests:  
The hind part coils along the deep,  
And undulates with sinuous sweep.  
The lashed spray echoes: now they reach  
The inland belted by the beach.

And rolling bloodshot eyes of fire,  
Dart their forked tongues, and hiss for ire.  
We fly distraught; unswerving they  
Toward Laocoon hold their way;  
First round his two young sons they wreath,  
And grind their limbs with savage teeth:  
Then, as with arms he comes to aid,  
The wretched father they invade,  
And twine in giant folds; twice round  
His stalwart waist their spires are wound,  
Twice round his neck, while over all  
Their heads and crests tower high and tall.  
He strains his strength their knots to tear,  
While gore and slime his fillets smear,  
And to the unregardful skies  
Sends up his agonizing cries;  
A wounded bull such moaning makes,  
When from his neck the axe he shakes,  
Ill-aimed, and from the altar breaks.  
The twin destroyers take their flight  
To Pallas' temple on the height;  
There by the Goddess' feet concealed  
They lie, and nestle 'neath her shield.  
At once through Ilium's hapless sons  
A shock of feverous horror runs:  
All in Laocoon's death-pangs read  
The just requital of his deed,  
Who dared to harm with impious steel  
Those planks of consecrated deal.'

We could have got over the deal, or thrown the blame on Virgil; but the planks are quite too much for us; and, in our vexation, we are even inclined to retract, or at least to qualify, our praise: not a single line is objectionable, but not a single line takes hold either of us or its successors. In fact, we have scarcely met with any lines which deserved separate immortality, except those from the speech of Panthus:—

'We have been Trojans; Troy has been:  
She sat, but sits no more, a queen.'

The arming of Priam is very well done, and is a welcome relief after a dull couplet to inform us that—

'The Greek  
Is potent where the flames are weak.'

'Perhaps you ask of Priam's fate;  
He when he sees his town o'erthrown,  
Greeks bursting through his palace-gate,  
And thronging chambers once his own,  
His ancient armour, long laid by,  
Around his palsied shoulders throws,  
Girds with a useless sword his thigh,  
And totters forth to meet his foes.  
Within the mansion's central space,  
All bare and open to the day,  
There stood an altar in its place,  
And, close beside, an aged bay,  
That drooping o'er the altar leaned,  
And with its shade the home-gods screened.'

But after this brief experience of the superior vigour of alternate rhymes, we have the old sing-song in Heecuba's speech.

We shall close our extracts from this book

with the parting speech of Creusa, in order to contrast it with the version of Pitt, to whose taste and elegance we have scarcely yet done justice:—

“Why grieve so madly, husband mine?  
Nought here has chanced without design:  
Fate and the Sire of all decree  
Creusa shall not cross the sea.  
Long years of exile must be yours,  
Vast seas must tire your labouring oars;  
At length Hesperia you shall gain,  
Where through a rich and peopled plain  
Soft Tiber rolls his tide;  
There a new realm, a royal wife,  
*Shall build again your shattered life.*  
Weep not your dear Creusa's fate;  
Ne'er through Mycenæ's haughty gate  
A captive shall I ride,  
Nor swell some Grecian matron's train,  
I, born of Dardan prince's strain,  
To Venus' seed allied:  
Heaven's mighty mother keeps me here:  
Farewell, and hold our offspring dear.”

The line we have marked is perhaps a thought too modern, though it recalls the most Virgilian of our modern poets, but we are more inclined to complain of the way in which

‘Dardanis, et divæ Veneris nurus’

is spun out, and the touching epithet, ‘common,’ is curtailed.

Pitt begins—

‘Why with excess of sorrow raves in vain  
My dearest lord, at what the gods ordain?  
Oh, could I share thy toils! but fate denies;  
And Jove, dread Jove, the sovereign of the  
skies.

In long, long exile, art thou doomed to sweep  
Seas after seas, and plough the wat'ry deep.  
Hesperia shall be thine, where Tyber glides  
Through fruitful realms, and rolls in easy tides.  
There shall thy fates a happier lot provide,  
A glorious empire, and a royal bride.  
Then let your sorrows for Creusa cease;  
For know, I never shall be led to Greece;  
Nor feel the victor's chain, nor captive's shame,  
A slave to some imperious Argive dame,  
No!—born a princess sprung from heaven  
above,

Ally'd to Venus, and derived from Jove,  
Sacred from Greece, 'tis mine, in those abodes,  
To serve the glorious mother of the Gods.  
Farewell; and to our son thy care approve,  
Our son, the pledge of our commutual love!’

One sees at a glance that these versions belong to two opposite schools of translation: of the two, Pitt's is the more consistent; whenever a metrical difficulty presents itself, the original is expanded to the required size. Mr. Conington hesitates; sometimes he cuts down his original, sometimes he spins his original out; but the maxim that two wrongs do not make a right

is as true in translations as in conduct. If we are to choose between the two, we should say that we preferred Mr. Conington's rhymes and Mr. Pitt's rhetoric.

The sober friskiness of the following lines is a charming contrast to the unheroic gaiety of the parallel passage in ‘The Lord of the Isles,’ which must be familiar to all our readers.

‘Ortygia left, we skim the deeps  
By Naxos' Bacchanalian steep,  
Olearos and Donyssa green,  
And Parian cliffs of dazzling sheen,  
Pass Cyclad isles o'er ocean strown,  
And seas with many a land thick sown.  
The rowers sing merrily as we go,  
For Crete, and our forefathers, ho!’

We make no further extracts from the Third Book, as it is one of those which interest the modern reader least, though its antiquarian learning, and the poetical effect of the succession of short-sighted attempts to disappoint the destiny of Rome, must always have been interesting to Romans. Indeed, this remark applies to the poem as a whole. Æneas was an unlimited transparency to them; Rome shone through him, but the light is quenched for us. It was easy for a Roman to regard the devotion of Dido, or the gallantry of Turnus, with the same grudging eyes, as those with which a modern Catholic regards the courageous sincerity of John Knox, or a modern Protestant regards the scientific heroism of Ignatius Loyola. It was enough that Rome needed their destruction, for the world was made for Rome. Moreover, Dido, whose claims to pity were strongest, had committed a sin against Roman morals, which commentators seldom notice, in contemplating a second marriage, even if the marriage had been as valid as Juno intended, instead of being as worthless as Æneas maintained. And perhaps, assuming Dido to be bound by the same point of honour as Roman ladies, we might be content to abandon her to her fate, if we could only make quite sure that Æneas understood the marriage-law better than Juno.

We pass over the introductory half of the Fourth Book, not caring to complete our list of expressions like,—

‘Ere wound I thee my woman's fame,’

or

‘Let nations thus their lives unite,  
And common federation plight.’

Or the rather prosaic attribute of Mercury's wand, which, we are told, ‘induces sleep.’

These blemishes are not unredeemed by happier renderings like this:—

‘No, let him sail; that word in one  
Says all: be thus our errand done.’

Dido's first passionate address to *Æneas* on his menaced departure, would be very good if Virgil were not better, that is, more passionate; and, after all, to be passionate in easy and uniform couplets is rather a difficult task, even to a Byron.

'What! would the wretch his crime conceal,  
And, like a thief, from Carthage steal?  
*Nor present love, nor hand once plighted,*  
No dying Dido stays your flight?  
Nay, you sail 'neath winter's sky,  
And through the rush of tempests fly,  
Ah cruel! Sure, if lands unknown  
Were not to sack, were Troy your own,  
E'en for that Troy, your ancient home,  
You ne'er would cross yon angry foam.  
From me you fly! Ah! let me crave,  
By these poor tears, that hand you gave—  
Since, parting with my woman's pride,  
My madness leaves me nought beside—  
By that our wedlock, by the rite  
Which, but begun, could yet unite,  
If e'er my kindness held you bound,  
If e'er in me your joy you found,  
Look on this falling house, and still,  
If prayer can touch you, change your will.  
For you I angered Libyan hordes,  
Woke jealous hate in Nomad lords,  
Lost Tyrian hearts; for you, the same,  
I trampled on my own good name,  
That wifely honour, which alone  
Had placed me on a starry throne.  
Think, think, to whom you make bequest  
Of dying Dido, gentle guest!  
Since fate but that cold name allows  
To him whom once I called my spouse.  
Why should I live to see my town  
By my fierce brother battered down,  
Or e'en myself a captive led  
To Moor Iarbas' bridal-bed?  
Ah! had I, ere you chose to rove,  
Ta'en from your arms some pledge of love,  
Some child *Æneas* to recall  
Your face, and gambol in my hall,  
The sire had cheered me in the son,  
Nor had I seemed so all undone!'

The third line is a little pedantic in its precision; one can fancy Queen Elizabeth wooing in such a style, but not Queen Dido; and Moor Iarbas is an objectionable Latinism. 'Dying-Dido,' we suppose, must sound pathetic to Mr. Conington, as he repeats it twice. *Æneas'* reply cannot be interesting in any version, but

Your favours count,  
I question not the vast amount,'

is a harsher and clumsier beginning than was necessary. Dido's next speech is better given by Symmons:—

'Traitor! thou falsely speak'st thy race divine:  
Sprung from no goddess, of no hero's line!  
Thou Canaan's begot of stony brood!  
Hyrcanian tigers suckled thee with blood!  
For why should I dissemble?—why prolong  
The courtesy of speech for greater wrong?

Touch'd with my love, did once his eyes incline?

Heaved he one sigh, or dropp'd one tear with mine?

Of which dire ill shall I complain the first?

Which wrong upbraid, as sharpest and the worst?

My wrongs—now, now injustice reigns above,  
Great Juno heeds not, or Saturnian Jove.  
Nowhere is faith! Wreck'd, indigent, undone,

The man I raised—placed madly on my throne:  
Drew to my ports his fleet, dispersed and lost;  
Rescued from death his famine-smitten host.  
But now—ah me! The Furies fire my brain!  
Now speaks Apollo—now the Lycian fane!  
Now Jove's own herald, through the aerial way,

Bears the great Father's mandate—to betray!  
Such cares, forsooth, the realms above infest;  
And break the terror of celestial rest!  
Go! I detain thee not,—thy plans are good!  
Go! and through storms be Italy pursued!  
Go! o'er the billows seek thy promised realm!  
But oh! may storms disperse, and billows whelm.'

Now let us hear Professor Conington:—

'No goddess bore you, traitorous man:  
No Lardanns your race began:  
No—'twas from Caucasus you sprung,  
And tigers nursed you with their young.  
Why longer wear the mask, as though  
I waited for some heavier blow?  
Heaved he one sigh at tears of mine?  
Moved he those hard impassive eyne?  
Did one kind drop of pity fall  
At thought of her who gave him all?  
What first, what last? Now, now I know  
Queen Juno's self has turned my foe:  
Not e'en Saturnian Jove is just:  
No faith on earth, in heaven no trust.  
A shipwrecked wanderer up and down,  
I made him share my home, my crown:  
His shattered fleet, his needy crew  
From fire and famine's jaws I drew.  
Ah, Furies whirl me! now divine  
Apollo, now the Lycian shrine,  
Now heaven's own herald comes; to bear  
His grisly mandate through the air!  
Ay, Gods above ply tasks like these:  
Such cares disturb their life of ease.—  
I loathe your person, scorn your pleas.  
Go, seek your kingdom o'er the foam,  
Hunt with the winds your Latian home.'

The next stage of her passion, is, in the original, one of the most beautifully described, though there is something languid in the elegance of Professor Conington's translation of it. But the concluding scene is almost perfect:—

'Then, maddening over crime, the queen,  
With blood-shot eyes, and sanguine streaks  
Fresh painted on her quivering cheeks,  
And warming o'er with death foreseen,  
Through inner portals wildly fares,  
Seals the high pile with swift ascent,

Takes up the Dardan sword, and bares,  
 Sad gift, for different uses meant.  
 She eyed the robes with wistful look,  
 And, pausing, thought awhile and wept:  
 Then pressed her to the couch, and spoke  
 Her last good night or e'er she slept.  
 "Sweet relics of a time of love,  
 When fate and heaven were kind,  
 Receive my life-blood, and remove  
 Those torments of the mind.  
 My life is lived, and I have played  
 The part that Fortune gave,  
 And now I pass, a queenly shade,  
 Majestic to the grave.  
 A glorious city I have built,  
 Have seen my walls ascend,  
 Chastised for blood of husband spilt,  
 A brother, yet no friend.  
 Blest lot! yet lacked one blessing more,  
 That Troy had never touched my shore."  
 Then, as she kissed the darling bed,  
 "To die! and unrevenged!" she said,  
 "Yet let me die: thus, thus I go  
 Exulting to the shades below.  
 Let the false Dardan feel the blazo  
 That burns me pouring on his gaze,  
 And bear along, to cheer his way,  
 The funeral presage of to-day."

There is scarcely a single false note throughout, except, perhaps, that 'exulting' is an exaggerated rendering of 'juvat.' In the description of the Sibyl's prophetic throes, Mr. Conington had the precedent of Scott to guide him, in the last prophecy of Coustance in 'Marmion'; and the involuntary blessing of the Abbot, in 'The Lord of the Isles'; and he recalls what is best in his model:—

'Within the mountain's hollow side  
 A cavern stretches high and wide:  
 A hundred entries thither lead;  
 A hundred voices thence proceed,  
 Each uttering forth the Sibyl's rede.  
 The sacred threshold now they trod:  
 "Pray for an answer! pray! the God,"  
 She cries, "the God is nigh!"  
 And as before the doors in view  
 She stands, her visage pales its hue,  
 Her locks dishevelled fly,  
 Her breath comes thick, her wild heart glows,  
 Dilating as the madness grows,  
 Her form looks larger to the eye,  
 Unearthly peals her deep-toned cry,  
 As breathing nearer and more near,  
 The God comes rushing on his seer,  
 "So slack," cries she, "at work divine?  
 Pray, Trojan, pray! not else the shrine  
 Its spell-bound silence breaks."

The speech of *Æneas* is less successful, and his first quatrain—

'Phœbus, who ever hadst a heart  
 For Ilium's woe to feel,  
 Who guided Prius' Dardan dart  
 True to Achilles' heel,'

has much of the prosaic dexterity, the creep-

ing neatness of the expiring ballad style, and the rest of the speech is tedious.

The theological discourse of Anchises is very fairly rendered, though we wish that Mr. Conington had preserved Mr. Tennyson's beautiful rendering of 'Marmoreo æquore,' but the reader shall judge for himself:—

'Know first, the heaven, the earth, the main,  
 The moon's pale orb, the starry train,  
 Are nourished by a soul,  
 A bright intelligence, which darts  
 Its influence through the several parts  
 And animates the whole.  
 Thence souls of men and cattle spring,  
 And the gay people of the wing,  
 And those strange shapes that ocean hides  
 Beneath the smoothness of his tides.  
 A fiery strength inspires their lives,  
 An essence that from heaven derives,  
 Though clogged in part by limbs of clay,  
 And the dull "vesture of decay,"  
 Hence wild desires and grovelling fears,  
 And human laughter, human tears;  
 Immured in dungeon-seeming night,  
 They look abroad, yet see no light.  
 Nay, when at last the life has fled,  
 And left the body cold and dead,  
 E'en then there passes not away  
 The painful heritage of clay;  
 Full many a long contracted stain  
 Perforce must linger deep in grain.  
 So penal sufferings they endure  
 For ancient crime, to make them pure:  
 Some hang aloft in open view  
 For winds to pierce them through and through,  
 While others purge their guilt deep-dyed  
 In burning fire or 'whelming tide.  
 Each for himself, we all sustain  
 The durance of our ghostly pain;  
 Then to Elysium we repair,  
 The few, and breathe this blissful air:  
 Till, many a length of ages past,  
 The inherent taint is cleansed at last,  
 And nought remains but ether bright,  
 The quintessence of heavenly light.  
 All these, when centuries ten times told  
 The wheel of destiny have rolled,  
 The voice divine from far and wide,  
 Calls up to Lethe's river side,  
 That earthward they may pass once more,  
 Remembering not the things before,  
 And with a blind propension yearn  
 To fleshly bodies to return.'

After the Sixth Book, Virgil seems to fall to a lower poetical level, though the last six books are relieved by many beautiful episodes. We extract the conclusion of the sortie of Nisus and Euryalus:—

'Fierce Volscens storms, yet finds no foe,  
 Nor sees the hand that dealt the blow,  
 Nor knows on whom to fly.  
 "Your heart's warm blood for both shall pay,"  
 He cries, and on his beauteous prey  
 With naked sword he sprang.  
 Scared, maddened, Nisus shrieks aloud:  
 No more he hides in night's dark shroud,  
 Nor hears the o'erwhelming pang:

"Me, guilty me, make me your aim,  
 O Rutules! mine is all the blame;  
 He did no wrong, nor e'er could do;  
 That sky, those stars attest 'tis true;  
 Love for his friend too freely shown,  
 This was his crime, and this alone."  
 In vain he spoke; the sword fierce driven,  
 That alabaster breast had riven.  
 Down falls Euryalus, and lies  
 In death's enthralling agonies:  
 Blood trickles o'er his limbs of snow;  
 "His head sinks gradually low;"  
 Thus, severed by the ruthless plough,  
 Dim fades a purple flower:  
 Their weary necks so poppies bow,  
 O'erladen by the shower.  
 But Nisus on the midmost flies,  
 With Volscens, Volscens in his eyes;  
 In clouds the warriors round him rise,  
 Thick hailing blow on blow:  
 Yet on he bears, no stint, no stay;  
 Like thunderbolt his falchion's sway:  
 Till as for aid the Rutule shrieks  
 Plunged in his throat the weapon reeks:  
 The dying hand has reft away  
 The life-blood of its foe.  
 Then, pierced to death, asleep he fell  
 On the dead breast he loved so well.'

The pathetic address of Mezentius to his horse, after the death of Lausus, is given as follows by Mr. Conington:—

'Long have we lived, if long the date  
 Conferred on aught of mortal state:  
 Now Rhæbus, will we twain to-day  
 A glorious trophy bear away,  
 The Trojan's arms and severed head,  
 In vengeance for my Lausus dead:  
 Or if the vantage be denied,  
 We twain will perish side by side:  
 For ne'er I ween, my gallant horse,  
 Will soul so generous stoop perforce  
 To other mastery, nor deign  
 That Trojan hand should sleek thy mane.'

Here Dryden is excellent:—

'O Rhæbus, we have lived too long for me  
 (If life and long were terms that could agree);  
 This day thou either shalt bring back the head  
 And bloody trophies of the Trojan dead;  
 This day thou either shalt revenge my woo  
 For murder'd Lausus, on his cruel foe;  
 Or, if inexorable fate deny  
 Our conquest, with thy conquer'd master die;  
 For, after such a lord, I rest secure,  
 Thou wilt no foreign reins, or Trojan load,  
 endure.'

The debate between Drances and Turnus represents the high-water mark of the two best translators of the *Æneid*, if not of Virgil's poetry, but it is far too long to be extracted at full. These lines, from the speech of Turnus, strike us as unusually spirited:—

'Then roll your thunders—'tis your way—  
 And call me coward, as well you may;

You, whose strong hand has heaped the plain  
 With trophied trunks and hills of slain.  
 What glowing bravery can do,  
 Wetwain may try, myself and you:  
 No distant foemen wait our call:  
 Behold them mustered round the wall!  
 Come, march we on to meet the foe!  
 What, Drances linger? why so slow?  
 Has Mars found out no worthier seat  
 Than that loose tongue, those flying feet?  
 Confess defeat? I routed? I?  
 Who dares retail that slanderous lie?

This is as vigorous as Dryden, and neater and more scholarly, but as the speech proceeds, Dryden seems carried on by the subject, while his competitor slackens his pace, till at the end we are ready to ask, with Mr. Conington, 'whether Dryden did not close the question of translating Virgil a hundred and seventy years ago?' Perhaps he was right in answering, No. His poem may be pitched in a lower key than Dryden, it may have more weaknesses and paler beauties; but those weaknesses and those beauties are different. A person who had read Dryden and Conington would have a completer idea of Virgil than one who had read Dryden only. In fact a person who had read Conington alone would have a better idea of the direction of Virgil's greatness than a person who had read Dryden alone, though the latter would have a better idea of its extent and power and beauty. The former might probably think Virgil rather tame, but occasionally downright and able, but he would be sure that he was refined and frequently pathetic; the latter might think Virgil rough and careless, but he would be sure that he was a great poet. Then the mere fact that a scholar, with Mr. Conington's prestige, should have translated the *Æneid* at all, will give a fresh impulse to Virgilian study. Symmons did good service in his day, though his book was costly, and he himself was, as he tells us, a friendless and obscure old man, while Mr. Conington commands and deserves a more extensive audience. Many will be indebted to him for refreshing their recollection of Virgil; not a few for their only acquaintance with the first of Latin poets. Some will thank him, as we do, for leading us to practise the pastime of his schoolboy days, in a detailed comparison of Dryden, Pitt, and Symmons, with each other and with him. But, on the whole, lovers of sound scholarship will, we suspect, unite in the hope that translations, at least from such quarters, should cease; and in the respectful suggestion that the Professor of Latin at Oxford would do more for classical literature by following the example recently set by the Professor of Latin at Cambridge than by

persevering in the composition of translations. In the present state of our literature especially, such work as the work in Mr. Monro's edition of *Lucretius* is a far greater gain than any translation,—even though that translation represented the original far more perfectly than the version of Mr. Conington.

#### ART. VI.—EMPEDOCLES.

THE figure of Empedocles of Agrigentum, when seen across the twenty-three centuries which separate us from him, presents perhaps a more romantic appearance than that of any other Greek philosopher. This is owing in a great measure to the fables which invest his life and death with mystery, to his reputation for magical power, and to the wild sublimity of some of his poetic utterances. Yet, even in his lifetime, and among contemporary Greeks, he swept the stage of life like a great tragic actor, and left to posterity the fame of genius as a poet, a physician, a patriot, and a philosopher. The well-known verses of *Lucretius* are enough to prove that the glory of Empedocles increased with age, and bore the test of time. Reading them, we cannot but regret that poems which so stirred the reverent enthusiasm of Rome's greatest singer have been scattered to the winds, and that what we now possess of their remains affords but a poor sample of their unimpaired magnificence.

Nothing is more remarkable about Empedocles than his versatility and comprehensiveness. Other men of his age were as nobly born, as great in philosophic power, as distinguished for the part they bore in politics, as celebrated for poetic genius, as versed in mystic lore, in medicine, and in magic arts. But *Parmenides*, *Pythagoras*, *Pausanias*, and *Epimenides* could claim honour in but one, or two at most, of these departments. Empedocles united all, and that too, if we may judge by the temper of his genius and the few legends handed down to us about his life, in no ordinary degree. He seems to have possessed a warmth and richness of nature which inclined him to mysticism and poetry, and gave a tone of peculiar solemnity to everything he did or thought or said. At the same time, he was attracted by the acuteness of his intellect to the metaphysical inquiries which then were agitating the western colonies of Greece, while his rare powers of observation enabled him to make discoveries in the then almost unexplored region of natural science. The age in which he lived had not yet thrown

off the form of poetry in philosophical composition. Even *Parmenides* had committed his austere theories to hexameter verse. Therefore, the sage of Agrigentum was easily led to combine his splendid powers on the production of one great work, and made himself a poet among philosophers, and a philosopher among poets, without thereby impairing his claims to rank highly both as a poet and also as a thinker among the most distinguished men of Greece. But Empedocles had not only deeply studied metaphysics, nature, and the arts of verse; whatever was mysterious in the world around him, in the guesses of past ages, and in the forebodings of his own heart, possessed a powerful attraction for the man who thought himself inspired of God. Having embraced the *Pythagorean* theories, he maintained the fallen state of men, and implored his fellow-creatures to purge away the guilt by which they had been disinherited and exiled from the joys of heaven. Thus he appeared before his countrymen not only as a poet and philosopher, but also as a priest and purifier. Born of a wealthy and illustrious house, he did not expend his substance merely on horse-racing and chariots, by which means of display his ancestors had gained a princely fame in Sicily, but, not less proud than they had been, he shod himself with golden sandals, set the laurel crown upon his head, and, trailing robes of Tyrian purple through the streets of Agrigentum, went attended by a crowd of serving-men and reverent admirers. He claimed to be a favourite of *Phœbus*, and rose at length to the pretension of divinity. His own words show this, gravely spoken, with no vain assumption, but a certainty of honour well deserved:—

'Friends who dwell in the great city hard by the yellow stream of *Aeragas*, who live on the *Acropolis*, intent on honourable cares, harbours revered of strangers, ignorant of what is vile; welcome: but I appear before you an immortal god, having overpassed the limits of mortality, and walk with honour among all, as is my due, crowned with long fillets and luxuriant garlands. No sooner do I utter their proud prosperous cities than men and women pay me reverence, who follow me in thousands, asking the way to profit, some desiring oracles, and others racked by long and cruel torments, banging on my lips to hear the spells that pacify disease of every kind.'

We can hardly wonder that some of the fellow-citizens of Empedocles were jealous of his pretensions, and regarded him with suspicious envy and dislike, when we read such lines of lofty self-exaltation. Indeed, it is difficult for men of the nineteenth century to understand how a great and wise philosopher



could lay claim to divine honours in his own lifetime. This arrogance we have been accustomed to associate with the names of a Caligula and Claudius. Yet when we consider the circumstances in which Empedocles was placed, and the nature of his theories, our astonishment diminishes. The line of demarcation between this world and the supernatural was then but vague and undetermined. Popular theology abounded in legends of gods who had held familiar intercourse with men, and of men who had been raised by prowess or wisdom to divinity. The pedigrees of all distinguished families ended in a god at no great distance. Nor was it then a mere figure of speech when bards and priests claimed special revelations from Apollo, or physicians styled themselves the children of Asclepius. Heaven lay around the first Greeks in their infancy of art and science; it was long before the vision died away and faded into the sober daylight of Aristotelian philosophy. Thus when Empedocles proclaimed himself a god, he only stretched beyond the usual limit a most common pretension of all men learned in arts and sciences. His own speculations gave him further warrant for the assumption of the style of deity. For he held the belief that all living souls had once been demons or divine spirits, who had lost their heavenly birthright for some crime of impurity or violence, and yet were able to restore themselves to pristine splendour by the rigorous exercise of abstinence and expiatory rites. These rites he thought he had discovered; he had prayed and fasted; he had held communion with Phœbus the purifier, and received the special favour of that god, by being made a master in the arts of song, and magic, and healing, and priestcraft. Was he not therefore justified in saying that he had won again his rights divine, and transformed himself into a god on earth? His own words tell the history of his fall:—

‘Woe to me that I did not fall a prey to death before I took the cursed food within my lips! . . . From what glory, from what immeasurable bliss, have I now sunk to roam with mortals on this earth!’

Again he says—

‘For I have been in bygone times a youth, a maiden, and a flowering shrub, a bird, yea, and a fish that swims in silence the deep sea.’

From this degraded state the spirit gradually emerges. Of the noblest souls he says—

‘Among beasts they become lions dwelling in caverns of the earth upon the hills, and laurels among leafy trees, . . . and at last pro-

phets, and bards, and physicians, and chiefs among the men of earth, from whence they rise to be gods supreme in honour, . . . sitting at banquets with immortal comrades, in their feasts unvisited by human cares, beyond the reach of fate and wearing age.’

Empedocles, by dint of pondering on nature, by long penance, by the illumination of his intellect and coercion of his senses, had been raised before the natural term of life to that high honour, and been made the fellow of immortal gods. His language upon this topic is one of the points in which we can trace an indistinct resemblance between him and some of the Indian mystics. There is, however, no reason to suppose that Asiatic thought had any marked or direct influence on Greek philosophy. It is better to refer such similarities to the working of the same tendencies in the Greek and Hindu minds.

To those who disbelieved his words he showed the mighty works which he had wrought. Empedocles, during his lifetime, was known to have achieved marvels such as only supernatural powers could compass. More than common sagacity and ingenuity in the treatment of natural diseases, or in the removal of obstacles to national prosperity, were easily regarded by the simple people of those times as the evidences of divine authority. Empedocles had devised means for protecting the citizens of Agrigentum from the fury of destructive winds. What these means were, we do not know; but he received in consequence the title of *καλυνσας*, or warder-off of winds. Again, he resuscitated, from the very jaws of death, a woman who lay senseless and unable to breathe, long after all physicians had despaired of curing her. This entitled him to be regarded as a master of the keys of life and death; nor did he fail to attribute his own power to the virtue of supernatural spells. But the greatest of his achievements was the deliverance which he wrought for the people of Selinus from a grievous pestilence. It seems that some exhalations from a marsh having caused this plague, Empedocles, at his own cost, cut a channel for two rivers through the fen, and purged away the fetid vapours. A short time after the cessation of the sickness, Empedocles, attired in tragic state, appeared before the Selinuntians at a banquet. His tall and stately figure wore the priestly robe; his brazen sandals rang upon the marble as he slowly moved with front benign and solemn eyes; beneath the sacrificial chaplet flowed his long Phœbean locks, and in his hand he bore a branch of bay. The nobles of Selinus rose; the banquet ceased; all did him reverence, and hailed him as a god, deliverer of their

city, friend of Phœbus, intercessor between angry Heaven and suffering men. Coins were struck at Selinus to commemorate their liberation from the scourge. Two of them remain, on each of which Empedocles is represented standing by the side of Phœbus in his car. Phœbus is shooting with the bow of pestilence; but Empedocles restrains his hand, and curbs the horses, which seem rushing forward on the pathway of destruction.

Closely connected with his claim to divinity was the position which Empedocles assumed as an enchanter. Gorgias, his pupil, asserts that he often saw him at the magic rites. Nor are we to suppose that this wizardry was a popular misinterpretation of his real power as a physician and philosopher. It is far more probable that Empedocles himself believed in the potency of incantations, and delighted in the ceremonies and mysterious songs by which the dead were recalled from Hades, and secrets of the other world wrung from unwilling fate. We can form to ourselves a picture of this stately and magnificent enchanter, convinced of his own supernatural ascendancy, and animated by the wild enthusiasm of his ardent nature, alone among the mountains of Girgenti, or by the sea-shore, invoking the elemental deities to aid his incantations, and ascribing the forebodings of his own poetic spirit to external inspiration or the voice of gods. In solitary meditations he had wrought out a theory of the world, and had conceived the notion of a spiritual God, one and unseen, pure intellect, an everlasting omnipresent power, to whom might be referred those natural remedies that stopped the plague, or cured the sick, or found new channels for the streams. The early Greek philosophers were fond of attributing to some 'common wisdom' of the world, some animating soul or universal intellect, the arts and intuitions to which they had themselves attained. Therefore, with this belief predominating in his mind, it is not strange that he should have trusted to the divine efficacy of his own spells, and have regarded the results of observation as a kind of supernatural wisdom. To his friend Pausanias the physician he makes these lofty promises, 'Thou shalt learn every kind of medicines that avert diseases and the evils of old age. Thou too shalt curb the fury of untiring winds, and when it pleases thee thou shalt reverse thy charms and loose avenging storms. Thou shalt replace black rain-clouds with the timely drought that men desire, and when the summer's arid heat prevails thou shalt refresh the trees with showers that rustle in the thirsty corn. And thou shalt bring again from Hades the life

of a departed man.' Like the Pythagoreans whom he followed, he seems to have employed the fascination of music in effecting cures; it is recorded of him that he once arrested the hand of a young man about to slay his father, by chanting to the lyre a solemn soul-subduing strain. The strong belief in himself which Empedocles possessed, inspired him with immense personal influence, so that his looks, and words, and tones, went farther than the force of other men. He compelled them to follow and confide in him, like Orpheus, or like those lofty natures which in every age have had the power of leading and controlling others by innate supremacy. That Empedocles tried to exhibit this ascendancy, and to heighten its effect by gorgeous raiment and profuse expenditure, by public ceremonies and mysterious modes of life, we need not doubt. There was much of the spirit of Paracelsus in Empedocles, and vanity impaired the simple grandeur of his genius. In every age of the world's history there have been some such men—men in whom the highest intellectual gifts are blent with weakness inclining them to superstitious juggleries. Not content with their philosophical pretensions or with poetical renown, they seek a more mysterious fame, and mix the pure gold of their reason with the dross of idle fancy. Their very weakness adds a glow of colour, which we miss in the whiter light of more purely scientific intellects. They are men in whom two natures cross—the poet and the philosopher, the mountebank and the seer, the divine and the fortune-teller, the rigorous analyst and the retailer of old wives' tales. But none have equalled Empedocles, in whose capacious idiosyncrasy the most opposite qualities found ample room for co-existence, who sincerely claimed the supernatural faculties which Paracelsus must have only half believed, and who lived at a time when poetry and fact were indistinguishably mingled, and when the world was still absorbed in dreams of a past golden age, and in rich foreshadowings of a boundless future.

We are not, therefore, surprised to read the fantastic legends which involve his death in mystery. Whatever ground of fact they may possess, they are wholly consistent with the picture we have formed to ourselves of the philosopher, and prove at least the superstition which had gathered round his name. One of these legends has served all ages as a moral of the futility of human designs, and the just reward of inordinate vanity. Every one who knows the name of Empedocles has heard that, having jumped into Etna in order to conceal the time and

manner of his death, and thus to establish his divinity, fate frustrated his schemes by casting up his brazen slippers on the crater's edge. According to another legend, which resembles that of the death of Romulus, of Œdipus, and other divinized heroes, Empedocles is related to have formed one of a party of eighty men who assembled to celebrate by sacrifice his restoration of the dying woman. After their banquet they retired to sleep. But Empedocles remained in his seat at table. When morning broke, Empedocles was nowhere to be found. In reply to the questions of his friends, some one asserted that he had heard a loud voice calling on Empedocles at midnight, and that, starting up, he saw a light from heaven and burning torches. Pausanias, who was present at the sacrificial feast, sent far and wide to inquire for his friend, wishing to test the truth of this report. But piety restrained his search, and he was secretly informed by heavenly messengers that Empedocles had won what he had sought, and that divine honours should be paid to him. This story rests on the authority of Heraclides Ponticus, who professed to have obtained it from Pausanias. The one legend we may regard as the coinage of his foes, the other as a myth created by the superstitious admiration of his friends.

We have hitherto regarded Empedocles more in his private and priestly character than as a citizen. Yet it was not to be expected that a man so nobly born, and so remarkable for intellectual power, should play no public part in his native state. A Greek could hardly avoid meddling with politics even if he wished to do so, and Empedocles was not one to hide his genius in the comparative obscurity of private life. While he was still a young man, Theron, the wise tyrant of Agrigentum, died, and a powerful aristocracy endeavoured to enslave the state. Empedocles manfully resisted them, supporting the liberal cause with vehemence, and winning so much popular applause that he is even reported to have received and refused the offer of the kingly power. By these means he made himself many foes among the nobility of Agrigentum; it is also probable that suspicion attached to him for trying to establish in his native city the Pythagorean commonwealth, which had been extirpated in South Italy. That he loved spiritual dominion we have seen; and this he might have hoped to acquire more easily by taking the intellectual lead among citizens of equal rights, than by throwing in his lot with the aristocratic party, or by exposing himself to the dangers and absorbing cares of a Greek tyrant. At

any rate, it is recorded that he impeached and procured the execution of the leaders of the aristocracy, thus rescuing the liberty of his nation at the expense of his own security. After a visit to Peloponnesus Empedocles returned to Agrigentum, but was soon obliged to quit his home again by the animosity of his political enemies. Where he spent the last years of his life, and died, remains uncertain.

It remains to estimate the poetical and philosophical renown of Empedocles. That his genius was highly valued among the ancients appears manifest from the panegyric of Lucretius. Nor did he fail to exhibit the versatility of his powers in every branch of poetical composition. Diogenes Laertius affirms that forty-three tragedies bearing his name were known to Hieronymus, from whom he drew materials for the life of Empedocles. Whether these tragedies were really written by the philosopher, or by another Sicilian of the same name, admits of doubt. But there is no reason why an author, possessed of such varied and distinguished talents as Empedocles, should not have tried this species of composition. Xenophanes is said to have composed tragedies; and Plato's youthful efforts would, we fondly imagine, have afforded the world fresh proofs of his commanding genius, had they escaped the flames to which they were condemned by his maturer judgment. No fragments of the tragedies of Empedocles survive; they probably belonged to the class of semi-dithyrambic compositions, which prevailed at Athens before the days of Æschylus, and which continued to be cultivated in Sicily. Some of the lyrical plays of the Italians—such, for instance, as the *Orfeo* of Poliziano—may enable us to form an idea of these simple dramas. After the tragedies, Diogenes makes mention of political poems. These we may refer to the period of the early manhood of Empedocles, when he was engaged in combat with the domineering aristocracy, and when he might have sought to spread his liberal principles through the medium of gnomic elegies, like those of Solon or Theognis. The fragments of the *καθάρματα* sufficiently display his style of earnest and imperious exhortation to make us believe that at a time of political contention he would not spare this powerful instrument of persuasion and attack. In the next place, we hear of an epic poem on the invasion of Greece by Xerxes, which Empedocles is said to have left unfinished, and which his sister or his daughter burned with other papers at his death. The great defeat of the Medes took place while Empedocles was still a

youth. All Hellas had hung with breathless expectation on the event of Marathon and Salamis. The fall of Xerxes brought freedom and relief from terrible anxiety, not only to the towns of Attica and Peloponnese, but also to the shores of Sicily and Italy. It is not therefore unlikely that the triumph which excited Simonides and Æschylus to the production of masterpieces, may have stirred the spirit of the youthful patriot of Agrigentum. Another composition of Empedocles, which perished under his sister's hands, was a Proemium to Apollo. The loss of this poem is deeply to be regretted. Empedocles regarded himself as specially protected by the god of song and medicine and prophetic insight. His genius would therefore naturally take its highest flight in singing praises to this mighty patron. The hymn to Zeus, which has been ascribed to Cleanthes, and some of the pseudo-Orphic declamations, may give us an idea of the gravity and enthusiasm which Empedocles would have displayed in treating so stirring a theme. Of his remaining works we possess fragments. The great poem on Nature, the Lustral Precepts, and the Discourse on Medicine, were all celebrated among the ancients. Fortunately, the inductions to the first and second of these have been preserved, and some lines addressed to Pausanias may be regarded as forming the commencement of the third. It is from these fragments, amounting in all to about 470 lines, that we must form our judgment of Empedocles, the poet and the sage.

That Empedocles was a poet of the didactic order is clear from the nature of his subjects. Even as early as the time of Aristotle, critics disputed as to whether poems written for the purpose of scientific instruction deserved the name of poetry. In the *Poetics*, Aristotle says,—οὐδὲν δὲ κοινὸν ἔστιν Ὀμήρῳ καὶ Ἐμπεδοκλεῖ πλὴν τὸ μέτρον· διὸ τὸν μὲν ποιητὴν δίκαιον καλεῖν, τὸν δὲ φυσιόλογον μᾶλλον ἢ ποιητὴν. The title *φυσιόλογος* was of course generic, and might have been claimed by Heraclitus, on the strength of his prose writings, no less than by Empedocles. Lucretius, in the exordium to his poem, argues for the utility of disguising scientific precepts under the more attractive form of art; we sweeten the lips of the vessel that contains bitter medicine, in order to induce the child to take it readily. And not only had Empedocles this reason in his favour for the use of verse, but also, at the age in which he lived, it was still a novelty to write prose at all; nor would it have been consistent with his theories of inspiration, and with the mysticism he professed, to abandon the poetic form of

utterance. He therefore thought and wrote hexameters as naturally as the scientific men of the present day think and write their sentences and paragraphs, until the discourse is formed into a perfect whole. Allowing, then, for the subject of his poem, Empedocles was regarded by antiquity as first among the Greek didactic singers, though he competed with Parmenides for this distinction, and was placed upon a level with Lucretius. Lactantius mentions them both together in his definition of this kind of poetry. And Aristotle, in another treatise, now lost, but quoted by Diogenes, praises the artistic genius of the philosopher in these words: Καὶ Ὀμηρικὸς ὁ Ἐμπεδοκλῆς καὶ δεινὸς περὶ τὴν φράσιν γέγονε μεταφορικός τε ὢν καὶ τοῖς ἄλλοις περὶ τὴν ποιητικὴν ἐπιτείγμασι χρώμενος. The epithet Ὀμηρικὸς is very just; for not only is it clear that Empedocles had studied the poems of Homer with care, and had imbibed their phraseology, but he also possessed a genius akin to that of Homer in love of simplicity, in fidelity to nature, in unimpeded onward flow of energetic verse.

The simile of the girl playing with a water-clock, by which Empedocles illustrates his theory of respiration, and that of the lantern, which serves to explain his notion of the structure of the eye, are both of them Homeric in their unadorned simplicity and vigour. Again, such epithets as these, *πολναίματον* for the liver, *ἰλάερα* for the moon, *δευβελῆς* for the sun, *πολυστέφανος* for majesty, *θεμερῶπις* for harmony, and the constant repetition of *θεοὶ δολιχαῖνες τιμήσι φέριστοι*, have the true Homeric ring. Like Homer, he often chooses an epithet specific of the object which he wishes to describe, but not especially suited to the matter of his argument. Thus *πολυκλαύτων γυναικῶν* occurs when there was no particular reason to fix the mind upon the tearfulness of women. But the poetic value of the passage is increased by the mind being thus carried away from the logical order of ideas to a generality on which it can repose. At other times, when this is necessary, the epithets are as accurately descriptive as those of a botanist or zoologist: *ἐν κόγχῃσι θαλασσονομοῖς βαρυνώτοις . . . λιθορρίνων τε χελωνῶν*, for example. Again, Empedocles gives loose to his imagination by creating bold metaphors; he calls the flesh *σαρκῶν χιτῶν*, and birds *περοβάμονας κύμβας*. Referring to his four elements, he thus personifies their attributes: 'Fiery Zeus, and Herd, source of vital breath, and Aidoneus, and Nestis with her tears.' At another time he speaks of 'earth, and ocean with his countless waves, and liquid air, the sun-god and

ether girdling round the universe in its embrace.'

The passage too in which he describes the misery of earth rises to a sublime height. It may well have served as the original of Virgil's celebrated lines in the sixth *Æneid* :—

'I lifted up my voice, I wept and wailed, when I beheld the unfamiliar shore. A hideous shore on which dwell murder, envy, and the troop of baleful destinies, wasting corruption, and disease. Through Atë's meadow they go wandering up and down in gloom. There was the queen of darkness, and Heliopë with her far-searching eyes; and bloody strife, and mild-eyed peace, beauty and ugliness, swiftness and sloth, and lovely truth, and insincerity with darkling brows. Birth too and death, slumber and wakefulness, motion and immobility, crowned majesty and squalid filth, discordant clamour and the voice of gods.'

We can understand by these passages how Empedocles not only was compared with Homer by Aristotle, but also with Thucydides and *Æschylus* by Dionysius of Halicarnassus, who speaks of his 'austere harmony' (*αὐστηρὰν ἁρμονίαν*). The conciseness of his argumentative passages, the breadth of his treatment, and the dryness of his colouring, to quote the terms of painting, resemble the style of Thucydides, while his bold figures and gloomy grandeur are like those of *Æschylus*. Plutarch, in the treatise on the genius of Socrates, speaks of the style of Empedocles at large, both as regards his poems and his theories, as *μᾶλα βεβαρυνμένη*. This seems a contradiction to the 'austere harmony' of Dionysius. But there are passages which justify the title. This exordium, for instance, savours of prophetic fury :—

'It stands decreed by fate, an ancient ordinance of the immortal gods, established from everlasting, ratified by ample oaths, that, when a spirit of that race, which has inherited the length of years divine, sinfully stains his limbs with blood, he must go forth to wander thrice ten thousand years from heaven, passing from birth to birth through every form of mortal mutability, changing the toilsome paths of life without repose, even as I now roam, exiled from God, an outcast on this world, the bondman of insensate strife.

'Alas, ill-fated race of mortals, thrice accursed! from what dire struggles and what groans have ye been born! The air in its anger drives them to sea, and ocean spues them forth upon the solid land, earth tosses them into the flames of the untiring sun, he flings them back again into the whirlwinds of the air; from one to the other are they cast, and all abhor them.'

And the following adjuration has a frantic energy, to modern readers almost laughable but for its indubitable gravity,—

'Wretches, thrice wretches, keep your hands from beans!'

or, again, with reference to the abomination of animal food :—

'The father drags along his dear son changed in form, and slays him, pouring prayers upon his head. But the son goes begging mercy from his maniac sire. The father heeds him not, but goads him on, and, having slaughtered him, prepares a cursed meal. In like manner sons take their fathers, and children their mothers, and tearing out the life devour the kindred flesh. Will ye not put an end to this accursed slaughter? Will ye not see that ye consume each other in blind ignorance of soul?'

We do not wonder that the poems of Empedocles were pilfered by oracle-mongers in after ages.

But besides these passages, there are some of a milder beauty which deserve high praise for their admirable power of suggesting the picture which the poet wishes to convey. The following lines describe the golden age of old, to which Empedocles looked back with melancholy longing :—

'There every animal was tame and familiar with men, both beasts and birds, and mutual love prevailed. Trees flourished with perpetual leaves and fruits, and ample crops adorned their boughs through all the year. Nor had these happy people any Ares or mad Uproar for their god; nor was their monarch Zeus, or Cronos, or Poseidon, but Queen Cypris. Her favour they besought with pious symbols and with images, and fragrant essences, and censers of pure myrrh, and frankincense, and with brown honey poured upon the ground. The altars did not reek with bullocks' gore.'

It may sound ridiculous to say so, yet Empedocles resembles Shelley in the quality of his imagination and in many of his utterances. The lines just quoted, the belief in a beneficent universal soul of nature, the hatred of animal food, the love of all things moving or growing on the face of earth, the sense of ancient guilt and present evil, are all, allowing for the difference of centuries, and race, and education, points by which the Greek and the English poets meet in a community of nature. Two more quotations illustrative of the poetical genius of Empedocles may be quoted. In the first he describes the nature of God, invisible and omnipresent. In the second he asserts the existence of a universal law. They both are remarkable for simplicity and force and elevation of style :—

'Blessed is the man who hath obtained the riches of the wisdom of God; wretched is he who hath a false opinion about things divine.

'He (God) may not be approached, nor can we reach him with our eyes, or touch him with our hands. No human head is placed upon his

limbs, nor branching arms; he has no feet to carry him apace, nor other parts of man: but He is all pure mind, holy, and infinite, darting with swift thought through the universe from end to end.'

'This law binds all alike, and none are free from it: the common ordinance which all obey prevails through the vast spaces of wide-ruling air and the illimitable fields of light in endless continuity.'

The quotations which have served to illustrate the poetical genius of Empedocles, have also exhibited one aspect of his philosophy—that in which he was connected with the Pythagoreans. It is quite consistent with the whole temper of his intellect that he should have been attracted to the semi-Oriental mysticism which then was widely spread through Grecian Italy and Sicily. After the dissolution of the monastic commonwealth which Pythagoras had founded, it is probable that refugees imbued with his social and political theories scattered themselves over the adjacent cities, and from some of these men Empedocles may have imbibed in early youth the dreamlike doctrines of an ante-natal life, of future immortality, of past transgression and the need of expiation, of abstinence, of the bond of fellowship which bound man to his kindred sufferers upon the earth. It is even asserted in one legend that the philosopher of Agrigento belonged to the Pythagorean Society, and was expelled from it for having been the first to divulge its secrets. In after life these theories were developed by Empedocles after his own fashion, and received a peculiar glow of poetic colouring from his genius. There is no need to suppose that he visited the East and learned the secrets of Gymnosophists. A few Pythagorean seeds sown in his fruitful soil sprang up and bore a hundred-fold. Referring to the exordium of his poem on Nature, and to the lines in which he describes the unapproachable Deity, we find that Empedocles believed in a pristine state of happiness, in which the 'Demons,' or 'gods, long of life, supreme in honour,' dwelt together enjoying a society of bliss. Yet this state was not perfect, for some of these immortals stained their hands with blood, and some spoke perjury, and so sin entered in and tainted heaven. After such offence the erring spirit, by the fateful, irrevocable, and perennial law of the divine commonwealth, had to relinquish his heavenly throne and wander 'thirty thousand seasons' from his comrades. In this period of exile he passed through all the changes of metempsychosis. According to this rigorous and gloomy conception of Empedocles, this change was caused by the hatred of the

elements; earth, air, fire, and water refusing to retain the criminal, and tossing him about from one to the other without intermission. Thus, he might be a plant, a fish, a beast, or a human being in succession. But the transmigration did not depend upon mere chance. If the tortured spirit, environed, as he was, by the conflicting shapes and contradictory principles and baleful destinies which crowded earth—the 'over-vaulted cave,' the 'gloomy meadow of discord,' as Empedocles in his despair described our globe—could yet discover some faint glimmering of the truth, seize and hold fast some portion of the heavenly clue, then he might hope to re-ascend to bliss. Instead of abiding among birds, and other unclean beasts, and common plants, his soul passed into the bodies of noble lions, and mystic bay-trees, or became a bard, a prophet, a ruler among men, and lastly rose again to the enjoyment of undying bliss. Throughout these wanderings death was impossible. Empedocles laughed at the notion of birth and death; he seems to have believed in a fixed number of immortal souls, capable of any transformation, but incapable of perishing. So that when his spirits, falling earthward, howled at the doleful aspect of the hideous land, the very poignancy of their grief consisted in that bitter thought of Dante's, 'questi non hanno speranza di morte'—in that thought which makes the Buddhist welcome annihilation. It has been already hinted that, although the soul by its forced exile lost not only happiness but also knowledge, yet the one might be in part retrieved, and the other toilsomely built up again in some degree by patient observation, prayer, and magic rites. On this point hinges the philosophy of Empedocles. It is here that his mysticism and his science are united into one system. In like manner Plato's philosophy rests upon the doctrine of Anamnesis, and is connected with the vision of a past beatitude, the tradition of a miserable fall, and the prospect of a possible restoration. Empedocles, like Parmenides and Xenophanes in their disquisitions on the eternal Being, like Plato in his references to the Supreme Idea, seems to have imagined that the final Essence of the universe was unapproachable, and to have drawn a broad distinction between the rational and sensual orders, between the World as cognizable by pure intellect, and the world as known through the medium of human Sense. The lines of Empedocles upon God, which have been already quoted, are similar to those of Xenophanes: both philosophers assert the existence of an unknown Deity pavilioned in dense inscrutability, yet not the less to be



regarded as supreme and omnipresent and omnipotent—as God of gods, as life of life. How to connect this intuition with the speculations of Empedocles is difficult. The best way seems to be to refrain from identifying his eloquent description of the unknown God with the Sphærus of his scientific theories, and to believe that he regarded the same universe from different points of view at different times, as if in moments of high exaltation he obtained a glimpse of the illimitable Being by a process of ecstatic illumination, while in more ordinary hours of meditation his understanding and his senses helped him to obtain a knowledge of the actual phenomena of this terrestrial globe. His own language confirms this view of the case :—

‘Weak and narrow,’ he says, ‘are the powers implanted in the limbs of men; many the woes that fall on them and blunt the edge of thought; short is the measure of the life in death through which they toil; then are they borne away, like smoke they vanish into air, and what they dream they know is but the little each hath stumbled on in wandering about the world, yet boast they all that they have learned the whole—vain fools! for what *that* is no eye hath seen, no ear hath heard, nor can it be conceived by mind of man. Thou, then, since thou hast fallen to this place, shalt know no more than human wisdom may attain.

‘But, O ye gods, avert the madness of those babblers from my tongue, and cause the stream of holy words to issue from my hallowed lips. And thee, great Muse of Memory, maiden with the milk-white arms, I pray to thee to teach me things that creatures of a day may hear. Come from the House of Holiness, and bring to me her harnessed car.’

Here we see plainly set forth the impossibility of mortal, fallen intellects attaining to a perfect knowledge of the Universe, the impiety of seeking such knowledge, or pretending to have found it; and, at the same time, the limitations under which true science remains within the reach of human beings. *How* this science may be reached, he tells us in some memorable lines, probably supposed to issue from the lips of the Muse whom he invokes :—‘But come, search diligently, and discover what is clear in every realm of sense, . . . check the conviction of thy senses, and judge by reason what is evident in every case.’

Thus the senses, although feeble and erring guides, are, after all, the gates to knowledge; and their reports, when tested by the light of reason, form the data for human speculation. The senses, resident in the limbs, are composed in certain proportion of the four elements, which also constitute the earth. Therefore, between the frame of

man and the world outside him, there is a community of substance, whereby he is enabled to know. *Ὅμοια ὁμοίοις γινώσκειται* is the foundation of our philosopher’s theory of knowledge. The reasonable soul, being that immortal part of man whereon depends his personal identity, whether he take the shape of plant or animal, receives and judges the results of sensation. This theory, it will be observed, has a kind of general similarity to that of Parmenides. Empedocles draws a marked difference between the province of the senses and of the reason, and inveighs against the impotence of the former. Again, he speaks of the real being of the world as pure and perfect intellect, and at the same time elaborately describes the universe as it appears to human sense and understanding. But here the likeness ends. Parmenides has no mysticism, and indulges in no theology. He believes in the actual truth of his rational ontology, and sneers at the senses. ‘Thy fate it is,’ he says, ‘all mysteries to learn, both the unswerving mind of truth that wins a sure assent, and the vain thoughts of men, in which no certainty abides. But, baseless as they are, these also shalt thou learn; since thou must traverse every field of knowledge, and discern the fabric of the dreams of men.’ His ontology is just as elaborate as his physics, and he evidently considers its barren propositions of more value than any observations on astronomy or physiology. Empedocles, on the other hand, quite despaired of ontology, and gave all his mind to explanations of the physical universe—how it came to be, and what laws governed its alternations,—believing all along that there was a higher region of pure intellect beyond the reach of his degraded soul. ‘Here we see in a glass darkly, but then face to face.’ In this respect he resembled Xenophanes more than Parmenides. Xenophanes had said, ‘No man hath been, nor will ever be, who knows for certain all about the gods, and everything of which I speak, for should one publish the most sure and settled truth, yet even he cannot be said to *know*; opinion is supreme in all things.’ Empedocles belonged more to the age behind him than to that which followed; and his extensive knowledge of nature belonged to his artistic rather than to his scientific temperament.

Yet, allowing for the march of human progress during twenty-three centuries, we are bound to hold much the same language as Empedocles regarding the limitations of knowledge. We have, indeed, infinitely extended our observation of phenomena; we have gained fuller conceptions of the Deity and of the destinies of man. But the plum-

met which he threw into the bottomless abyss of science has yet found no bottom, and the circle which it made by striking on the surface of the illimitable ocean has grown and grown, but yet has touched no shore on any side. Like him, we still speak of an unapproachable God, utterly beyond the reach of human sense and intellect; like him, we still content ourselves with receiving the reports of our senses, comparing and combining them by means of our understanding, and thus obtaining some conception of the universe in which we live. If we reject the light of Christianity, the guesses which we form about a future world are less vague than those of Empedocles, but founded on no surer scientific basis; the God we worship still remains enveloped in symbols; we still ascribe to him, if not a human form, at least the reason, partialities, and passions of mankind. Indeed, in this respect, the sage of Agrigentum stood unconsciously upon the platform which only our profoundest thinkers have attained. He felt the awe of the Unseen—he believed in the infinite Being,—but he refused to dogmatize about his attributes, confining his own reason to the phenomenal universe which he strove in every way to understand, and to employ for the good of his race. Empedocles was greater than most of his contemporaries, for he neither believed it possible to explain the whole mystery of the world, nor did he yet reject the notion of there being a profound mystery. He steered clear between the Parmenides and Democritus of his own day—between the Spinoza and the materialist of modern speculation. Herein the union of philosophy and poetry, of thought and feeling, in his nature, gave the tone to all his theories. We must not, however, in our praise forget that all these problems appeared in a far more simple form to the Greeks of that age than to ourselves, and were therefore more hastily and lightly answered. Between the ontology of Parmenides and of Hegel what a step there is! What meagre associations gather round the one; what kaleidoscopic brilliance environs the other!

Remembering, therefore, in what light Empedocles regarded his own speculations, we may proceed to discuss them more in detail. We shall find that he deserved a large portion of that praise which Bacon rather whimsically lavished on the pre-Socratic philosophers, to the disadvantage of the mightier names of Plato and Aristotle.

The poem on Nature is addressed to Pausanias the physician, who was a son of Anchitus of Agrigentum, and a special friend of Empedocles. To Pausanias, the

philosopher begins his instruction with these words:—‘First learn what are the four chief roots of everything that is: fiery Zeus, and Herè, source of vital breath, and Aidoneus, and Nestis with her tears, who is the fount of moisture in the world.’ Thus Empedocles, after the fashion of the Pythagoreans, allegorized his four elements. In other passages he calls them ‘fire, water, earth, and air’s immeasurable height;’ or ‘earth, and ocean with his countless waves and liquid air, the sun-god, and ether girdling the universe in its embrace;’ or, again, ‘Hephaestus, rain, and radiant ether;’ or lastly, ‘light, earth, heaven, and ocean.’ It will be seen that he designated his elements sometimes by mythological titles, sometimes by abstract terms, and sometimes by selecting one or other natural object—such as the sun, the air, the ocean—in which they were most manifest. It is well known that Empedocles was the first philosopher to adopt the four elements, which, since his day, continued to rule supreme over natural science, until modern analysis revealed far simpler and broader bases. Other speculators of the Ionian sect had maintained each of these four elements,—Thales the water, Anaximenes the air, Heraclitus the fire, and perhaps (but this rests on no sure evidence), Pherecydes the earth. Xenophanes had said:—‘Of earth and water are all things that come into existence.’ Parmenides had spoken of dark and light, thick and subtle, substances. Each of these fundamental principles are probably to be regarded not as pure fire, or pure water, or pure air, but as universal elements differing in rarity, and typified according to the analogical necessities of language, by means of some familiar object. The four elements of Empedocles appear to have been suggested to him, partly by his familiarity with contemporary speculation, and partly by his observation of Nature. They held their ground so long in scientific theory, because they answered so exactly to a superficial view of the world. Earth with everything of a solid quality, water including every kind of fluid, fire that burns or emits light, air that can be breathed, appear to constitute an exhaustive division of the universe. Of the eternity of these four primal substances, according to the Empedoclean theory, there is no doubt. The philosopher frequently reiterates his belief in the impossibility of an absolute beginning or ending, though he acquiesces in the popular use of these terms to express the scientific conceptions of dissolution and recombination.

These elements, then, were the material part of the world according to Empedocles.

But inherent in them, as a tendency is inherent in an organism, and yet separable in thought from them as the soul is separable from the body, were two conflicting principles of equal power, love and discord. Love and discord by their operation wrought infinite changes in the universe: for it was the purpose of love to bind the elements together into a compact, smooth, motionless globe, and of discord to separate them one from another, and keep them distinct in a state of mutual hostility. When, therefore, either love or discord got the upper hand, the phenomenal universe could not be said to exist, but in the intermediate state was a perpetual order of growth and decay, composition and dissolution, whereby the world, as we behold it, came into existence. This intermediate state, *das Werdende*, τὸ γινόμενον καὶ ἀπολλύμενον, was φύσις, or Nature: the conflicting energies of love and discord formed the pulses of its mighty heart, the systole and diastole of its being, the one power tending to life, the other power to death, the one pushing all the elements forward to a perfect unity of composition, the other rending them apart. To the universe when governed by love in supremacy Empedocles gave the name of σφαῖρος, which he also called a god. This σφαῖρος answered to the Eleatic ἐν, while the disjointed elements subservient to the force of strife corresponded to the Eleatic πόλλα. Thus the old Greek antagonism of Good and Evil, One and Many, Love and Hatred, Being and Not-being, were interpreted by Empedocles. He looked on all that is, *das Werdende*, as transitory between two opposite and contradictory existences.

Again, according to his system, the alternate reigns of love and discord succeeded one another at fixed intervals of time; so that, from one point of view, the world was ceaselessly shifting, and from another point of view, was governed by eternal and unalterable Law. Thus he reconciled the Heraclitean flux and the Parmenidean immobility by a middle term. Each of the elements possessed a separate province, had separate functions, and was capable of standing by itself. To fire it would seem that the philosopher assigned a more active influence than to any of the other elements, so that a kind of dualism may be recognised in his Universe between this ruling principle and the more passive ingredients of air, earth, and water. The influence of love and harmony kept them joined and interpenetrated, and so mingled that the different objects which we see around us had their origin. Empedocles professed to understand the proportions of these mixtures, and measured them by

Pythagorean rules of arithmetic. Thus everything subsists by means of transformation and mixture; absolute beginning and ending are impossible.

Such, briefly stated, is the theory of Empedocles. The following passage may be quoted to show how the phenomenal Universe comes into being under the influence of love:—

‘When strife has reached the very bottom of the seething mass, and love assumes her station in the centre of the ball, then everything begins to come together, and to form one whole—not instantaneously, but different substances come forth, according to a steady process of development. Now, when these elements are mingling, countless kinds of things issue from their union. Much, however, remains unmixed, in opposition to the mingling elements, and these malignant strife still holds within his grasp. For he has not yet withdrawn himself altogether to the extremities of the globe; but part of his limbs still remain within its bounds, and part have passed beyond. As strife, however, step by step, retreats, mild and innocent love pursues him with her force divine; things which had been immortal instantly assume mortality; the simple elements become confused by interchange of influence. When these are mingled, then the countless kinds of mortal beings issue forth, furnished with every sort of form,—a sight of wonder.’

In another passage this development is compared to the operation of a painter mixing his colours, and forming with them a picture of various objects. Discord is said to have made the elements immortal, because he kept them apart, and would willingly have preserved their separate qualities, whereas love mixes them together, breaks up their continuity, and confuses their kinds. What Empedocles exactly meant by Sphaerus is hard to understand; nor do we know how far he intended Chance to operate in the formation of the Universe. He often uses such expressions as these, ‘So they chanced to come together,’ and describes the amorphous condition of the first organisms in a way that makes one think he fancied a perfectly chaotic origin. Yet ‘the art of Aphrodite,’ ‘so Cypris ordained their form,’ are assertions of designing intelligence. In fact, we may well believe that Empedocles, in the infancy of speculation, was led astray by his double nomenclature. When talking of Aphrodite, he naturally thought of a person ruling creation; when using the term ‘Love,’ he naturally conceived an innate tendency, which might have been the sport of chance in a great measure. It also appears probable that, when Empedocles used the terms ‘Chance’ and ‘Necessity,’ he referred to some inherent quality in the ele-

ments themselves, whereby they grew together under certain laws, and that the harmony and discord which ruled them in turn, were forces aiding and preventing their union.

To understand the order of creation, we may begin by imagining the sphere, which, in the words of Empedocles, 'by the hidden bond of harmony is stablished, and rejoices in unbroken rest . . . in perfect equipoise, of infinite extent, it stays a full-orbed sphere in unbroken rest.' Love now is omnipotent; she has knit all the elements into one whole; Discord has retreated, and abides beyond the globe. But soon his turn begins: he enters the sphere, and 'all the limbs of the god begin to tremble.' Now the elements are divided one from the other—ether first, then fire, then earth, then water from the earth. Still the elements are chaotic; but wandering about the spaces of the world, and 'permeating each the other's realm,' they form alliances, and tend to union. Love is busy no less than Discord. The various tribes of plants and animals appear at first in a rudimentary and monstrous condition: 'many heads sprouted up without necks, and naked arms went wandering forlorn of shoulders, and solitary eyes were straying destitute of foreheads.' Still the process of seething and intermingling continued; 'when element with element more fully mixed, these members fell together by baphazard . . . many came forth with double faces and two breasts, some shaped like oxen with a human front, others, again, of human race with a bull's head; and some were mixed of male and female parts. Unfortunately, the lines in which he describes the further progress of development have been lost, and we do not know how the interval between chaos and order was bridged over in his system. Only with reference to human beings he asserts that in the earliest stage they were produced in amorphous masses, containing the essence, as it were, of both male and female. That after the separation of these masses into two parts, each part yearned to join its tally. And therefore sprang the passion of desire in human hearts. This theory has been worked out by Plato artistically in the *Symposium*. Also, with reference to the formation of the phenomenal universe, he says that earth formed the basis of all hard and solid substances preponderating in the shells of fish, and so on. Bones were wrought of earth and fire and water, 'marvellously jointed by the bonds of Harmony.' It is needless to follow Empedocles through all his scattered fancies to show that he knew that the night was caused by the earth intercepting the sun's rays, or that he thought the sun re-

flected heaven's fire like a mirror, or that he placed the intellect in the blood, and explained respiration by a theory of pores, and the eyesight by imagining a fire shut up within the pupil. The fragments we possess are too scanty to allow of our obtaining a perfect view of his physical theory; all we gather from them is that Empedocles possessed more acquired and original knowledge than any of his contemporaries.

It may appear from what has been said about his system that Empedocles was at best a great Eclectic. But this is not entirely the case. If he deserves the name of Eclectic, he deserves it in the same sense as Plato, though it need not be said how infinitely inferior, as an original thinker, he is to Plato. Empedocles was deeply versed in all the theories, metaphysical, cosmogonical, and physiological, of his age. He viewed from a high station all the problems, intellectual, social, and moral, which then vexed Greece. But he did not pass his days in a study or a lecture-room, nor did he content himself with expounding or developing the theories of any one master. He went abroad, examined nature for himself, cured the sick, thought his own thoughts, and left an impress on the constitution of his native state. In his comprehensive mind all the learning he had acquired from men, from books, from the world, and from reflection, was consolidated into one system, to which his double interest for mysticism and physics gave a double aspect. He was the first in Greece to reconcile Eleatic and Heraclitean speculations, the puzzle of plurality and unity, the antagonism of good and evil, in one theory, and to connect it with another which revealed a solemn view of human obligations and destinies, and required a life of social purity and self-restraint. The misfortune of Empedocles as a philosopher consisted in this—that he succeeded only in resuming the results of contemporary speculation, and of individual research in a philosophy of indisputable originality, without anticipating the new direction which was about to be given to human thought by Socrates and Plato. He closed one period—the period of poetry and physical theories and mysticism. The period of prose, of logic, and of ethics was about to begin. He was the last of the great colonial sages of Greece. The Hellenic intellect was destined henceforth to centre itself at Athens.

#### ART. VII.—THE LOSS OF CALAIS.

ONE of the most striking events of the reign of Queen Mary the Catholic was the

loss of Calais. It has perhaps tended, as much as the persecution of the Reformers, towards making her name unpopular. As the latter has been ascribed to her bloody fanaticism, so has the loss of the last remnant of her English possessions on French soil been ascribed to her carelessness and incapacity. In order to re-establish the English nation in public estimation, the whole of the blame has been laid on one unpopular person, who, in the case of Calais, was certainly the least faulty of all. Even in modern times, and in popular histories, this false view of the case is still held. Documents have been brought forward, some of which—such as the account of John Highfield\*—emanated from the very persons accused of having, by their treason or cowardice, caused the loss of the place. Others—such as, for example, a letter from Lord Wentworth of the 29th December 1557—have been entirely misrepresented.† Most of the documents, however, relating to these events, have hitherto remained unknown. But by these it appears that the Queen, far from being unmindful of the defence of her realm, did her duty faithfully, although she was unhappily nearly the only person who performed it.

Calais was not lost because no steps had been taken to provide against an attack, or because no orders had been given for its speedy relief; for as soon as the Queen was apprised of the projected inroad of the French, she ordered troops to proceed thither. It was not lost because England had been embroiled in a war with France, for Henry II. had, during the peace in 1553, and the spring of 1557, made several unsuccessful attempts to surprise Calais. Nor was it lost because Philip, the titular King of England, and its ally, did not succour it in time. For Philip was bound by those much-praised treaties which Stephen Gardiner had imposed upon him, not to allow any foreign troops to enter into English fortresses.

Calais was lost because all the orders given for its defence were unavailing. Never since the Conquest had the real power of England descended so low. A series of unpopular Governments, and of violent internal dissensions, had undermined the morality of the individual, and consequently the strength of the country. Patriotism was only known under the form of suspicion of any stranger. Loyalty was shown by asking for grants and pensions; courage and

activity by plotting and intriguing.\* Calais was lost because Englishmen whose creed or interest differed from that of the actual Government were ever and anon on the alert to give information to the French, and to urge them to undertake an attack against England. It was lost because the English garrison fought badly; because the very man to whom the defence was intrusted persisted in giving false information to the Queen, and doing nothing to prepare against an attack. It was lost because Lord Wentworth, the deputy, who had long before been warned by the Flemish governors of the danger threatening his charge, took no notice of these warnings. Did his patriotism make him suspect any information coming from the officers of Philip? or did he thoroughly despise a foe who had lost all battles in the preceding campaign? Did he overrate his resources and the valour of his troops?

The French had indeed met with heavy losses during the year 1557. In Italy, the Duke of Guise had been baffled by the brave defence of Ciritella, by the talent of Marc Antonio Colonna, and the pedantic slowness of Alva. He had been forced to retire, leaving Pope Paul IV. at the mercy of his enemy. On the northern frontier of France things had gone even worse. After the disastrous battle fought near St. Quentin, that place, together with Ham and Chatelet, had been forced to surrender. So terrible had been these blows that the Spanish army, in the month of November, had approached within forty miles of Paris without being opposed.\*

But it was too late to undertake any serious attack or siege. The season was too far advanced, and the money collected for the campaign had been spent.† The greater part of the German troops were therefore dismissed.‡ Strong garrisons were put into the newly conquered fortresses, while the frontier of Flanders, which was considered to be in comparative security, was left with nothing beyond the ordinary guard.§

While Philip was forced, by want of money, to abandon any further attack, the French were recovering from the blow they had received. Money was flowing fast into the royal exchequer.¶ The Duke of Guise, who had returned from Italy, and who had received from Henry II. the command of the troops, was thus enabled to form a new

\* Brussels, Archives du Royaume, Pap. d'Etat. 66, fol. 338.

† Simancas, Est. 514, fol. 148.

‡ Paris, Arch. de l'Emp. K. 1490 pl. 117, 120.

§ Ibid. K. 1490, No. 99.

¶ Ibid. K. 92, No. 1, k.

\* Printed in the Hardwicke Papers, but lost in the original.

† Froude's *History of England*.

army. Swiss and German mercenaries were joining his standard at Compiègne, while a portion of his veteran army was hastening thither from Piedmont.\* The Spanish Generals were well aware of these armaments, but thought at first that they were directed against one of the new conquests, which, they knew, were perfectly able to resist. Indeed, this seems to have been for a few days the plan of Guise.† But his spies gave him such information as made it appear highly improbable that he could conquer any of the towns.

On the other hand, the attack upon Calais, which had been already meditated in June, might this time prove successful. Calais was a fair prize: a large and flourishing town, an almost impregnable fortress, the last remnant of English possessions on French soil. Its conquest would outweigh the loss of St. Quentin. From the bishop of Dax, from the French ambassador returning from England, and from Senarpont, governor of Boulogne, as well as from the English refugees, Guise had received an account of the position and fortification of the English Pale. It was not encouraging. The natural difficulty of the soil, he was told, had been much increased by art. The triangular tract of low marshy land was divided into two halves by the river Hammes running from south to north between deep morasses. At the northern angle of the Pale the fortress of Guisnes was situated, on the river the castles of Hammes and Newneham which defended the passage. At this latter place the road from Boulogne crossed the water by a long and narrow bridge. Below it, the river, widening into a broad channel, turned to the right and ran nearly westward, being divided from the sea by a narrow range of sand-hills. On the right bank, a mile below Newneham, lay the castle and town of Calais, while opposite, on the extreme point of the sand-hills, stood the castles of Rysbank defending the entrance of the harbour. Sluices were constructed at Newnehambridge, by means of which, as Guise was told, the whole of the Pale could be inundated, and the passage of the Hammes rendered impossible.

These fortresses and castles (of Guisnes, Hammes, Newneham, Calais, and Rysbank) formed a system of defences so extensive that it was impossible to enclose the whole. An enemy, however, who could not cross the Hammes between the different forts, could not blockade any one separately. Provisions and succour could be received at all hours

as long as the line remained unbroken. These fortifications were certainly formidable enough. But, on the other hand, Guise full well knew that the men to whom their defence was intrusted were deficient in military qualities, and that little, if anything, would be done to succour them. The days were gone when English archers could strike terror into the ranks of the French. From the beginning of the century perpetual and general wars had taken place on the Continent. The inexperienced foot militia of the early days of Charles and Francis had grown into standing armies of old and trained soldiers. The few companies of clumsy gendarmes had lost their importance on being superseded by numerous regiments of German pistoliers or mounted arquebusiers. The use of firearms had become general, nearly a third of the foot and half of the horse being provided with them, and the bow had been rendered an antiquated weapon. The superior quality of the arms then in use, together with the increased number of troops, had also altogether changed the mode of fighting. It had made tactics a complicated art. Drill and discipline had become as necessary as courage; officers could no longer be merely brave leaders without experience, nor soldiers nothing but brave men unused to war. But while all continental soldiers had progressed with the times, while the armies of Henry II. and Philip consisted of well-drilled veterans led by experienced officers, the English had not only remained stationary, but had even lost their warlike qualities. Unaccustomed to danger, they were perpetually over-rating it. Mistrusting their own skill, they did not look upon their fellow-soldiers as being better than themselves. Without confidence in their officers, who could not even enforce the ordinary discipline, they lacked all those powerful links which made a company of Spanish or German veterans feel and act as one man. With the exception of the Sappers, who year after year had fought under the banner of Charles and Philip, they were therefore considered as nothing but a raw militia. English foot-soldiers received sixpence a day, that is to say, fourteen shillings a month of four weeks,\* while Italian and Spanish were paid twenty-four to thirty shillings (four to five ducats), and Swiss and Germans from thirty to thirty-six shillings and sixpence (five to six ducats), besides numerous double pays. But though the English received only half the pay given to Italians, Philip steadily refused to receive more of them than the stipulated number,

\* Paris, Arch. de l'Emp. K. 92, No. 1, h. o.

† *Ibid.* K. 92, No. 7.

\* Br. Mus. Cal. c. v. 30.



when the Earl of Pembroke was to succour him in the summer of 1557,\* looking on them as nearly useless. And so they proved. For, when the Earl took the field at the head of his four thousand men, his troops were so unaccustomed to carry even their weapons, that they were harassed by their weight, and, not being able to make any of the customary marches,† they did not arrive until two days after the battle of St. Quentin. Philip's opinion was shared by the English Council and the English captains. When, in January 1558, a plan was proposed, emanating from Count Egmont,‡ according to which ten thousand men were to occupy Etaples and besiege Montrucil, while Philip was to keep the French army at bay, thereby cutting off Calais from France, the English Council replied that, if they sent English troops, twenty thousand would be wanted instead of ten thousand, and that even these would not be able to bear the hardships of an early campaign.§

To such troops, numbering from seventeen to eighteen hundred men,|| the defence of the Pale was intrusted. They were placed under the command of the deputy of Calais, Thomas Lord Wentworth, a man of small capacity, of no energy, of great arrogance and conceit, and withal unmindful of his duties.

The inadequacy of the troops, and certain hopes of treason, held out to him by the English refugees, outweighed in the mind of Guise the strength of the fortifications. Abandoning his former plans, he therefore sent Marshal Strozzi, in the disguise of a peasant, to examine the defences of the Pale. The Marshal, on his return, confirmed his opinion that an attack upon Calais had some chance of success.

The expedition was now resolved upon. The army was collected at Abbeville, and every preparation was made for a long and energetic siege.¶ The account commonly given of the subsequent events is absolutely incorrect. It is generally said that Lord Wentworth was taken by surprise, and that a vague rumour of the movements of the French first reached Guisnes on the 22d of December.\*<sup>1</sup> This is false, for Wentworth had received the first warnings in the middle of December.† On the 18th, Noyelle gov-

ernor of New Hesdin sent him a detailed account of what was to take place a fortnight later.\* Noyelle had received it from a most trustworthy and able spy, a gentleman of some rank in the French army. Two officers, well acquainted with the Duke's plans, had, with great imprudence, talked them over in his presence.

The French army, which by that time had become very numerous, was to march straight upon Calais. There the French intended (as they afterwards did) to attack Newneham and Rysbauk at the same time. Having won these outposts, and having blockaded the place on every side, they intended to bring up their cannon on the sand-hills in front of the town, and to batter the wall from across the harbour, which they hoped would be fordable at low water, so that they might storm the town by wading across. Details, respecting the state of the fortifications, and the preparations made to attack them, were given in such a way as to make it clear to any unbiassed mind that the taking of Calais was really the end which the French had in view. As appears from the indorsement of the letter from the spy, Noyelle sent a copy of it to Lord Wentworth, as well as to Bugnicourt and to the Duke of Savoy. While the latter fully understood the importance of the warning, and ordered reinforcements to hasten to St. Omer and Gravelines,‡ Lord Wentworth took no notice of it. Though the report showed a perfect knowledge of all the feeble points of Calais, though every assertion contained in it was rendered highly probable by the reasons given for it, still, emanating as it did from a Fleming, it failed to disturb the sluggish nature of the deputy. He protested that all these preparations were intended against some Flemish fortress. He boasted that the French, if they dared attack him, would fare the worse for it. But he did nothing to make his deeds as good as his words, he took no steps to ascertain whether the intelligence given to him was true, none to provide, at all hazards, for the better defence of the weak points indicated in the report. He did not even apprise Lord Grey, who commanded at Guisnes, of the news he had received. Lord Grey had, however, on the 22d, himself received a copy of the spy's report, sent him by Bugnicourt, the governor of Artois. He wrote immediately to the Queen, sending her the intelligence he had just received.† His own scouts, he said,

\* Simancas, Est. Leg. 514, fol. 159.

† *Ibid.* fol. 153, 154, 150.

‡ Brussels, A. d. R., P. d'Etat 67, fol. 63.

§ Br. Mus. Tit. B. ii. fol. 58.

|| R. O. Foreign, Mary, vol. ii. fol. 677.

\* Brussels, A. d. R., L. d. Seign. vol. 18, fol. 375.

\*<sup>1</sup> Froude, *History of England*.

† Brussels, A. d. R., L. d. Seigneurs, vol. 18, fol. 375, 385, 385; vol. 19, fol. 17.

\* Brussels, A. d. R., L. d. Seigneurs, vol. 18, fol. 405, 406.

† *Ibid.* vol. 19, fol. 426.

‡ R. O. Mary, Foreign, vol. ii. fol. 695.

had given him no such information, still Bugnicourt was a man to whose warnings it would be well to attend. The places, he thought, would not long resist such an attack if reinforcements were not sent over; Guisnes his peculiar charge he would do his best to defend. Lord Wentworth meantime let slip the precious hours which might have served to prepare for a defence. But on the 26th, tidings of such a nature arrived, and were so generally known, that to remain deaf any longer to such intelligence would have been sheer treason. One of the English spies, who was at Abbeville on the 23d, had there seen the French army, which was to move the following day towards the Pale.\* Lord Wentworth sent over this intelligence to the Queen, but full eight days had elapsed since he had received the first intimation from Noyelle. A council of war was summoned for the 27th at Calais, in which it was judged to be highly probable that the French would attack the English Pale without delay. It was therefore decided that the open country, together with the lesser forts, should be abandoned, and that only Guisnes, Hammes, Newneham, Rysbank, and Calais itself should be defended. It was presumed that the actual number of troops would for a time be sufficient for the service. In the report of the sitting sent to the Queen, she was, however, urged to send over at once some officers of experience with more men, ammunition, and provisions, in order, if possible, to defend the whole country.† The Queen, who has been so often accused of indifference and mismanagement in this affair, had, as soon as she received Grey's letter of the 22d, ordered that four hundred men, previously meant to be reduced in number, should be retained.‡ She now ordered the Duke of Rutland, together with some other gentlemen, to proceed to Calais, and to concert with the Lords Wentworth and Grey the necessary measures for its defence.§ At the same time orders were issued to levy soldiers, and send them to the coast, ships for their passage were prepared, everything, in short, was done to provide for the safety of the Pale. Had it not been for the folly of Wentworth, Calais would still have been saved. But after the return of Grey to Guisnes, the deputy once more relapsed into his state of criminal carelessness. He wrote, on the 29th, privately to the Queen,|| saying that, although the French army was, in fact, already at Boulogne,¶ still he could assure her positively that it had encamped

before New Hosdin, forty miles from Calais. The latter town was therefore no longer in immediate danger; and the Queen, upon so positive an assurance, recalled the appointment of Rutland, and countermanded the levying of troops. Some fifty men only who had already arrived at Dover were to go to Calais.\*

It is impossible to ascertain from what source Lord Wentworth received this intelligence, as he himself, strange to say, does not mention it. He added, however, a statement, which a man knowing the country, as he must have done, ought to have clearly seen was false intelligence, though the Queen, not being acquainted with the details, was unable to detect the contradiction. He said that at Ardres, the French were baking bread. The victualling of Ardres was always a matter of considerable difficulty for the French; it would have been folly, therefore, to have really believed, what he pretended to do, namely, that the bread was destined for an army some thirty miles in the rear, which could more easily have obtained victuals out of France. It was, on the contrary, a most certain sign that the French forces were intended shortly to arrive in the vicinity of Ardres and of the Pale. A suspicion may be entertained that Wentworth seized upon the very first rumour suiting his wishes, perhaps not mentioning the source of his information, for fear of causing it to be discredited. Be this as it may, after this most fatal letter he resumed his old course. The repeated warnings which Vandervile, governor of Gravelines, gave him, he treated with contempt.† Even when Lord Grey wrote on the afternoon of the 31st that the French army had been desisted marching from Ambleteuse towards the Pale‡, and when a body of French horse, having turned the Sandgate, had already appeared before Rysbank, the deputy could not be brought to prepare for his defence. He sent, on the contrary, an express to Gravelines to contradict most vehemently Grey's intelligence. The French, he said, were still at Neufehatel, some thirty miles away, and would attack Hesdin, Reuty, or Lillers. He added, superciliously, that he had better spies than the Flemings, promising to inform Vandervile if anything were to happen.§

The messenger arrived at Gravelines late in the evening. At midnight the governor, with a heavy heart, was writing to Bugnicourt respecting the warnings of Grey and the perverse folly of Wentworth, when he

\* R. O. Mary, Foreign, fol. 697. † *Ibid.* fol. 698.

‡ *Ibid.* fol. 698.

§ *Ibid.* fol. 699.

|| *Ibid.* fol. 700.

¶ *Ibid.* fol. 699.

‡ Paris Bibl. Imp.

\* Ms. Fr. 4738.

† Brussels, A. d. R., L. d. S. vol. 18, fol. 452.

‡ *Ibid.* fol. 461.

§ *Ibid.* fol. 460.

was startled by an ominous sound.\* Instead of the merry peals which should usher in a new year, the alarm-bells rang throughout the Pale to announce the arrival of the French. Guise's army had on the 31st reached the frontier.† The Duke, as the chronicle pretends, waited until the year 1557 had entirely closed. So fatal had it been to France that he feared it would bring misfortune upon himself to begin his undertaking before it had ended its course. At midnight, however, his vanguard crossed the border, and appeared before the outer forts which cover the heights between the Sandgate on the sea-shore and Guisnes.

It was impossible to deny any longer that the French army was at hand. Wentworth this time communicated the news, not to the Queen, but to Philip, to whom hitherto he had not written.‡ He briefly stated that the whole of the French army was at hand. He begged it might be looked after. He gave, however, no details whatever, nor did he state his opinion that this force was intended for more than one of the occasional inroads which the French were wont to make in the open land of the Pale. He did not ask for reinforcements, nor propose any means for the relief of the place. So long as this was not done, he must have known Philip would do nothing. The King was far too narrow-minded and scrupulous a man to act so entirely against the treaty of 1554, as to allow his troops or officers to enter into an English fortress without having been previously released in some way or other from his promise. Thus Wentworth, who does not seem to have written to the Queen, was left on the first of January to cope with the French, with only the garrison he had at Calais and the other fortresses of the Pale.

The French at first did not press hard upon the English. Their cannon and ammunition, their baggage, and even part of their troops, were still in their rear. Small skirmishes only ensued during the 1st and 2d of January, in which Sir Anthony Aucher, the marshal of Calais, behaved with great gallantry, and took the place of the lord-deputy, who was nowhere to be seen. The French were driven back on the causeway leading to Newneham, but they occupied the forts of Sandgate and those of Froithan and Nielles, where they, however, were checked in their further progress, as the sea was let in through Newneham bridge, and Aucher appeared in their front.

This partial success had heightened the

conceit of Wentworth. He wrote in high spirits to the Queen, giving her an account of the gallant behaviour of the garrison of Newneham, and telling her how 'right manfully' that of Froithan and Nielles behaved while abandoning their charge without being forced to do so.\* He had, however, by this time perceived that the French intended a regular siege. He therefore asked for succour both from England and from the King.† The latter would probably have proved the most efficient. But it was too late. Besides, Wentworth's letter to Philip was carefully worded. He did not ask directly for succour, but that orders might be given to the governor to send him four hundred Spaniards whenever he should ask for them. Time was thus lost, and the Spaniards never entered the place, as the town was soon afterwards blockaded by superior forces.‡

During the fight on the causeway before Newneham, the Duke of Guise had, amidst the fire of the English cannon, reconnoitred the defences of Calais. At ten o'clock at night he went on the sand-hills towards Rysbank, to do the same, while some French gentlemen whom he sent into the harbour, found it fordable at low ebb, opposite the castle and the town.§ The same night the approaches were made both before Rysbank and Newneham, exactly as the spy had reported a fortnight before. This was a work of considerable difficulty. The causeway which led to Newneham, the only approach to it, was but thirty feet broad, and was flanked on both sides by deep morasses, besides being right under the fire of the bridge. Had the English kept good watch, d'Etrées, master of the Ordnance, and d'Aumale, Guise's brother, who had the command at this point, would not have been able to execute their purpose. But the garrison had been rendered incautious by their fancied triumph of the day. So the French, with little loss, were able to throw up a cover of sandbags, and bring up some cannon. Near the Rysbank the task was as difficult. The soil, a loose sand, afforded no foundation on which to place the cannon. No trenches could be made to protect the men, and the guns, when brought up through nearly a mile of deep sand, right under the fire of the castle and town of Calais, were taken in flank by the latter. But the English were as careless here as at Newneham. Accordingly, through the untiring energy of

\* Brussels, A. d. R. L. d. S. vol. 18, fol. 458

† Paris, Bibl. Imp. Mss. Fri. 4738.

‡ Simancas, Estado, Leg. 1810, fol. 10.

\* R. O. Mary, Foreign, vol. ii. fol. 711.

† Simancas, Est. Leg. 810, fol. 11.

‡ Brussels, A. d. R., L. d. S. vol. xix. fol. 19, 20

§ Paris, Bibl. Imp. Mss. Fr. 4738.

Peter Strozzi and his men, the cannon were brought up, and at dawn this battery too opened fire on the defences of the English.

At Newnham the garrison was greatly dismayed when the shots of the French cannon, flashing through the greyish twilight of the morning, indicated to them the progress the enemy had been able to make during the night. The Captain Nicholas Alexander, although he had a competent number of men, asked for succour.\* Lord Wentworth met his demand with a refusal. Though he knew that by the loss of the bridge Calais would be cut off from all succour by land, he ordered the Captain to retire to the town in case he thought that he could not defend the fort.† His stupid incredulity had now given way to a pusillanimity as contemptible and as injurious as his former conceit. The courage of the subordinates did not, unhappily, in this case counterpoise the timidity of the chief. The fire of the French cannon had killed one of the English gunners, the rest, unused to war in earnest, were so dismayed that they abandoned their pieces, though they were twice as numerous and infinitely better posted than those of the French. Alexander, therefore, upon receiving Wentworth's answer, gladly seized the pretext given to him. He spiked the guns, set fire to the stores and houses around, and withdrew, at ten o'clock, into the town,‡ after having defended for only a little more than two hours an almost impregnable fort, in which no breach whatever had been made. The French, who at first could scarcely believe that the fort had been abandoned, at last occupied the bridge, and poured over their troops to surround the town.

At the Rysbank nearly the same want of energy. The French cannon, more numerous here than at the bridge, had dismounted some of the English pieces.§ The fire from the town was not kept up, the garrison lost heart, and would no longer man the defences. The tide being so high that retreat was impossible, Harleston, the captain, surrendered at eleven o'clock with a garrison of nearly one hundred and fifty men, and threw himself on the mercy of Guise || Unhappily the high tide had prevented him asking Lord Went-

worth's approval, so the unfortunate man was sentenced to death in 1559 for his cowardly behaviour, and executed at Tyburn.\* Neither of the forts could have been stormed, no breach whatever having been made; both were lost simply by the cowardice of those who had charge of them, and by the pusillanimity of Wentworth. Had either of them held out till night, succour would have arrived, and the fate of Calais would have been averted.

The news of the appearance of Guise's army in the Pale had reached the English Court on the 2d of January. By order of the Queen the Earl of Rutland again set out,† and on the 3d, at one o'clock p. m., he took ship at Dover. He was half over, when he was met by the 'Saere,' an English man-of-war, coming from Calais, and he incautiously permitted his men to converse with those of the 'Saere.' Discipline was a thing hardly known on board an English ship at that time. The mariners, as soon as they heard of the loss of the Rysbank, refused point-blank to proceed.‡

On the other hand, Vandervile, though he had as yet received no positive orders, had intended that very night to have introduced into the place three hundred Spanish arquebusiers under Bernardino de Ayala.§ But immediately after the retreat of Alexander became known to the Duke of Guise, the latter had sent the Prince de la Roche sur Yon, with 6000 foot and 1000 horse to surround the town from the bridge down to the Gravelines shore.

An able and brave commander might still have defended and held the town, which was of great strength. The garrison consisted, notwithstanding the loss of 150 men in the Rysbank, of 700 to 800 soldiers, besides a considerable number of mariners, armed burghers and peasants. With guns, ammunition, and victuals, the place was sufficiently provided. But Lord Wentworth's pusillanimity and apathy disheartened the men, and prevented any measure from being taken for a better defence. The same night the Duke of Guise rode round the town, reconnoitring it. He found it of enormous strength. Towards the west, south and east, it was surrounded by deep morasses or open tracts of loose sand, and defended by strong walls and deep ditches. Towards the north lay the harbour, the castle standing at the upper end of the town, close to the water. The defences on this northern side consisted

\* Account of John Highfield, Hardwicke Papers, Brussels, A. d. R. Lettres des Seigneurs, vol. xix. fol. 14.

† Hardwicke Papers, R. O. Baga de Secretis, xxxviii.

‡ Paris, Bibl. Imp. Mss. F. 4738. Brussels, A. d. R., L. d. S. vol. xix. fol. 19, 102.

§ *Ibid.* fol. 102.

|| *Ibid.* fol. 15, 19, 20. *Ibid.* vol. xxi. fol. 15. Paris Bibl. Imp. Mss. Fr. 4738.

\* R. O. Baga de Secretis, xxxix.

† R. O. Mary, Foreign, 708, 709, 710.

‡ *Ibid.* 712.

§ 7 Brussels, A. d. R., L. d. S. 19. fol. 14. fol. 17.

of a high strong wall, the straight lines of which were unbroken, except by a few towers. Before the wall lay a deep wet ditch, separated from the harbour by a broad pier of masonry, which extended all along the town and the castle. At the lower end of the town towards the sea, the pier broadened, and a few houses that stood on it formed a little suburb encircled by a wall. It was on the northern side, and from across the harbour, that the attack was to be made, just as Noyelle's spy had predicted on the 18th December. A battery was constructed during the night on the sand-hills near Rysbank, and on the morning of the 4th its cannon opened fire upon the wall of the town near the water-gate.\* It lasted the whole day. The English cannon, though more numerous, could not silence the fire of the French. The gunners of Strozzi's battery bravely exposed their lives in the unequal contest, but the English did not show the same energy. In the afternoon, some cannon being dismounted, the men serving under John Highfield, Captain of the Ordnance, deserted their guns. On the 5th, the French, who had brought up more cannon, were able to continue their fire without opposition. It produced, however, but little effect. The distance across the harbour, the pier, and the wet ditch, some six hundred paces,† was enormous for the cannon of those times. The wall, moreover, was well lined with earth, and protected by the pier which was in front. The attack, which seemed hopeless at this place, was vigorously carried on at others. During the night of the 4th, Guise had sent d'Andelot (brother of the Admiral Coligny) with 1500 foot across the harbour, to occupy a little sand-hill in which the pier terminated towards the sea. Thence d'Andelot was advancing with trenches towards the wall of the suburb in order to gain possession of it. As long as this was not done, ships might easily run ashore at high tide near the pier, and safely land men and provisions on the sand-hill, or might, with some risk from the cannon of Rysbank, lie-to at the pier of the suburb. On the sand-hills, a little higher up than the former battery, a new one was erected opposite the castle.‡ The wall of the latter, so Guise was told by some Englishmen, was not, like that of the town, lined with earth. It would therefore not resist equally well. On the morning of the 6th, both batteries opened their fire with

more than thirty pieces against the unhappy town. While Calais was thus vigorously besieged and scarcely defended at all, little had been done to relieve it. On the 2d of January, Wentworth had written to King Philip, to ask that in case of need he might have four hundred Spanish arquebusiers who were at Gravelines.\* Vandervile, the governor of that place, was willing to send them even without orders,† and on the 3d he despatched Captain Salinas to Calais to confer with the deputy.‡ This was the moment when Newneham and the Rysbank were lost. Wentworth detained Salinas, but sent back a courier with pressing entreaties for succour.§ It was too late. The French had already surrounded Calais, and when Ayala's troops advanced on the 4th they were met by the French horse, and after a sharp fight driven back to Gravelines.|| Vandervile, however, received soon after positive orders from the King to send some troops to Calais. The French lines might with some risk be forced, and Vandervile had prepared an expedition for the night of the 6th, when he was diverted from his purpose by news from England.

The Earl of Rutland, when he returned to Dover, had there found Sir Thomas Gresham and Sir Henry Jerningham, who had been sent thither by the Queen to collect troops. Having got some men together he sent over a herald to Gravelines to learn from Vandervile where they might land, and how they were to enter Calais.¶ The herald arrived at Gravelines early on the 6th. Instead of simply stating his message, he vauntingly told the governor that the Earl had already embarked 10,000 men at Dover in forty vessels, and that he was to inquire where they might land.\*<sup>1</sup> The joy experienced by Vandervile equalled his astonishment at such good news. 'Anywhere,' he replied, 'between here and Gravelines, and as soon as possible.' The brave, bluff Fleming took the boasts of the Englishman for truths. The herald returned and reached Dover at night. If the Earl really had 10,000 men at his disposal, and if he had immediately sailed, he might with a fair wind have landed the troops on the morning of the 7th. Ten thousand Englishmen, no matter how bad troops they might have been, would have been able, with the assistance of a few hundred arquebusiers and horse, to break through the French lines,

\* Bruss. A. d. R., L. d. S. 19, fol. 36. Paris, Bibl. Imp. Mss. Fr. 4738, St. Vict. 1062.

† Paris, Bibl. Imp. St. Vict. 1062.

‡ Paris, Bibl. Imp. St. Vict. 1062, Mss. Fr. 4738, Delamar, 9484. 4.

\* Simancas, Est. Leg. 810, fol. 11.

† Bruss., A. d. R., L. d. S. vol. xix. fol. 14.

‡ *Ibid.* vol. xix. fol. 19.

§ *Ibid.* vol. xix. fol. 20.

|| *Ibid.* fol. 34. R. O. Mary, Foreign, 715.

¶ *Ibid.* 715.

\*<sup>1</sup> Brussels, A. d. R. xix. fol. 37.

which were most extensive. Visions of victory and of an inglorious retreat of the French were floating before the mind's eye of Vanderville, and were fostered by the assurances of Lady Wentworth and of certain men, who had escaped out of Calais, and asserted that the town was in a state to hold out for some time.\* Under such circumstances he did not think fit to expose the lives of three hundred brave men. The laws of war were very strict at that time. Soldiers who tried to enter a besieged town at night were hanged on the spot. The herald's account, however, was utterly false. The Earl's troops were few in number and nowise ready to cross. Had they even been ready, it would have been too late—Calais was lost the same night.

After a heavy cannonade, which lasted the whole day, Marshal Strozzi had asked for permission to cross the harbour, and, if possible, to entrench himself on the pier. Thence he could annoy those who were repairing the breach at the water-gate, as well as those who were defending the suburb. The Duke of Guise granted his request. At the same time he ordered M. de Grandmont to be in readiness to go over with 400 Gascons to the new battery. D'Andelot, whose trenches had reached the foot of the wall, was ordered to make a simultaneous attack on the suburb. The Duke himself with a strong body of foot remained on the sand-hills, ready to hasten to whatever spot there appeared a prospect of success.

About an hour after midnight the water was low enough;† Strozzi and his men plunged into the harbour, half wading half swimming over. But the moon shone brightly on the scene of action, the English sentinels desisted the advancing enemy, and gave the alarm. As soon as the French had climbed up the pier the watch opened a sharp fire upon them. To storm the breach was impossible, a deep wet ditch separated the pier from it. The fire was growing sharper every minute, and the French, entirely unprotected, had already lost some thirty men killed, and many wounded. To remain any longer would have been folly, so Strozzi fell back upon the harbour. D'Andelot at the same time advanced with ladders towards the suburb, but fared little better, and after a sharp fight was equally forced to retire. As soon, however, as the two attacks had begun, Guise, suspecting that almost all the garrison would have flocked to these spots,

ordered Grandmont to go over. If he found but little resistance he was to storm the breach and occupy the castle. The French accordingly entered the water, waded across to the pier, and with the help of ladders reached the top. They found before them a deep, wet ditch, and scarcely any breach whatever. Had there been any men to defend the castle they could not have carried it.\* But Guise had been right in his surmise. The undisciplined soldiers of the watch had almost all abandoned their post, the brave men running to the spot whence came the noise of the fight.† Eight or ten men who remained were easily kept off by the fire of the French arquebusiers, while other Frenchmen went down into the ditch, swam across the water, planted their ladders against the wall, and made themselves masters of the breach before succour could arrive from the town. They immediately occupied the whole castle, with the exception of a tower standing between it and the town, into which the few men remaining of the English garrison had retired.

The Duke of Guise, as soon as he perceived that the castle was won, led on the reserve and entered it. Having given the necessary orders, and leaving his brothers, the Duke d'Aumale and the Marquis d'Elbeuf and d'Etrées, General of the Ordnance, with other officers, and about 800 men to defend the castle, he himself returned to the other bank to provide other reinforcements for the moment when the water would again be at low ebb.

The English were stunned at first by the unexpected blow that had fallen on them. They soon recovered, however. Aucher, the marshal, on hearing the alarm, had arrived at the gate leading from the town to the castle. He fully understood that if the French could hold out for ten hours until they received succour, Calais would be irretrievably lost. The defences of the castle towards the town were not strong; the English much superior in number, and at last ready to fight. Collecting as many troops as he could, he led them across the bridge against the castle. From the tower which the English still held, a sharp fire was poured into the castle yard, and fireballs were thrown into it, while on the bridge and under the gateway a desperate struggle took place. For the first time during this siege the English fought well. The citizens knew that they fought for their home, while the soldiers tried, under

\* Brussels, A. d. R., vol. xix. fol. 37, 39.

† Paris, Bibl. Imp. Mss. Fr. 4738; St. Vict. 1062; St. Germain, 991; Paris, Arch. de l'Emp. K. 149, fol. 8.

\* Brussels, Arch. du Roy., Pap. d'Etat 47, fol. 4. Paris, Bibl. Imp. St. Vict. 1062.

† Paris, Arch. d'Emp. R. 1491, No. 8.



the guidance of an able and determined chief, to atone for their former conduct. They entered the castle yard, but could not maintain themselves in it. From the adjacent buildings the French poured a murderous fire down upon them, which forced them to fall back over the bridge. By this time John Highfield had, by order of Lord Wentworth, brought some cannon to bear upon the gate, which the French were trying to barricade. But the shots took little effect. Time was fast elapsing, so Aucher again collected his men, and led them a second time over the bridge. Guise, however, had not been inactive either. On the sand-hills some cannon had been pointed against the tower, and the English arquebusiers had been forced to abandon it. Some light pieces were also brought to bear upon the open space that separated the town from the castle. When the English renewed the attack they were vigorously opposed in front, while the shots from Guise's cannon took them in flank. Aucher's son was killed fighting at his father's side; Aucher himself fell mortally wounded, and with him fell, too, the last hope of Calais. The ranks of the English wavered, then they retired to the town, leaving the French in undisputed possession of the castle. All hope had vanished. Lord Wentworth, who was holding a council of war in a house on the market-place, sent John Highfield to the castle to treat for surrender. M. d'Etrées received him courteously. He proposed a capitulation, by which the town was immediately to be surrendered to the French, with whatever ordnance stores and property it contained; the common soldiers to return to England; the inhabitants to leave either for England or Flanders; Wentworth himself, with fifty others, to remain prisoners of war until they should be ransomed. The treaty was accepted at once by Lord Wentworth. Guise ratified it gladly, having been anxious, all the time, respecting his brothers and the many brave men he had left in the castle.\* The French entered, the prisoners were chosen and led off, the soldiers kept apart to be sent to England, and the citizens who wished to leave the place were, during the following days, escorted by Scotch horse to Gravelines and Dunkirk. The inhabitants were not treated with harshness. Nearly all of them were able to secure some money about their persons, and none were ill-treated. On the French side it was a gallant feat of arms; on the English, it was a notable instance of that incompetence in our

commanders which has so often brought discredit on the English name; and it shows that under bad government and bad leadership, even the spirit of the English people may sink, and the courage of the English soldier give way.

Calais received a garrison of 3000 men under Paul de Thermes. The rest of the army proceeded first towards Gravelines; but Vandervile seemed so resolute to defend the place, which had a competent garrison, that the French fell back. On the 13th they appeared before Guisnes. Lord Grey had a garrison of about 800 English, and 450 Flemings, and 40 Spanish arquebusiers sent to him by Bugnicourt. The town, which was weak, he abandoned; the castle, on the contrary, he defended with great resolution. But Guisnes was already doomed. The news of the fate of Calais had dismayed everybody in England except the Queen, who immediately gave orders to recover it. A furious storm, however, that blew on the 9th dispersed the fleet. Lord Pembroke, who was to take the chief command, left the army, pretending to be ill.\* Most of the soldiers, following his example, deserted;† nobody would do his duty; none of the orders were executed. Philip himself, despairing of success, advised the Queen not to make any further efforts.‡ Lord Grey, however, not knowing what was passing, withstood three assaults made after a terrible fire. At the fourth, a bastion was carried after three hours' fight, and the garrison forced to retire to the keep. This latter was so weak that it could not hold out. Lord Grey, therefore, surrendered Guisnes nearly on the same conditions as Calais. The officers remained prisoners, the citizens and the common soldiers were left at liberty. Small as the garrison was, from 300 to 400 English and Flemings had fallen; and of the 40 Spaniards, 22 were killed, and the rest nearly all wounded. Lord Grey had done his duty well, and, though unsuccessful, he was honoured even by his enemies. This was the last siege. The garrison of Hammes, as soon as it heard of the loss of Guisnes, revolted against the governor, Lord Edward Dudley, and abandoned the fort. With the exception of a few small places near Gravelines, which the Spaniards had occupied some months ago, the whole of the Pale was in possession of France. Guise did not attack any of the Flemish fortresses. The Duke of Savoy had at last been able to collect a force, not sufficient indeed to meet him in the open field;

\* Paris, Bibl. Imp. F. 4738, 17458, S. Vict. 1062. Arch. de l'Emp. K. 1491, fol. 8. 7. 43. 48.

\* Paris, Arch. de l'Emp. K. 1491, fol. 39.

† *Ibid.* fol. 39, 53, 56.

‡ Simancas, Est. 811, fol. 24.

but quite strong enough to hinder his progress, and prevent him from undertaking a new siege. Guisnes and Hammes having been blown up, the French army retired.

In France the news of this extraordinary victory was everywhere hailed with the greatest joy. The praise of the victor was sung in Latin and French. The capture of Calais was, in France and throughout Europe, looked on as the equivalent for the loss of St. Quentin. The two cases were, in one respect, very different. Frenchmen might have been proud of the defence of St. Quentin, and of Coligny, who, had he not been made a martyr, would have been cited as a hero; whilst it was a deep humiliation to the English to have lost an almost impregnable fortress by their own fault. But instead of rousing the spirit of the nation, as the losses of 1557 had done in France, it only created a sense of the utter weakness of England. Nobody would strike a blow for the recovery of Calais. Many schemes were started for the conquest of the Pale, but none were carried into effect. In the treaty of Château Cambresis, indeed, Elizabeth had, with the aid of Philip, a clause inserted that Calais was to be restored to England after five years; but it was a mere form to gratify the English. Nobody expected the promise to be kept. Calais, indeed, some years later, when internal dissensions had lowered the power of France, was torn from its grasp. But it was done by the Spaniards, who were then no longer the allies of England. Calais remained lost for ever to England.

Of the principal actors in this drama little remains to be said. Guise was murdered some years later by a servant of the Colignys. Lord Grey was treated with great distinction. Mary conferred the Order of the Garter on him; Philip allowed him to be exchanged for the Count de la Rochefoucault; Elizabeth on his return named him to the command of the forces on the northern marches.

Lord Wentworth was kept captive in France. He regained his liberty at the peace of Château Cambresis, strange to say, without paying any ransom. Queen Mary would not hear his name spoken, and Philip ordered his wife to be arrested, and his goods sequestered.\* Elizabeth on his return refused to see him;† everybody called him a traitor and a coward. He was, indeed, acquitted by his peers, but it was a mock trial, gone through at a period when Eliza-

beth, having recently ascended the throne, dared not use rigorous measures.

He came over to England in the month of April; on the 21st he was arrested, and tried next day.\* His real crime was passed over in silence, the whole case was put in a false light, and even the very dates assigned to the events were false in the indictments. Though direct proofs do not exist that he had treated with Guise to deliver the town into his hands, no doubt can be entertained that Calais was lost by his fault. The false intelligence he gave to the Queen, the opposition he made to receive any succour until it was too late, his recalling the garrison of Newnham, and his subsequent pusillanimity, were the real reasons of its fall. His peers acquitted him, history never can.

#### ART. VIII.—SUBMARINE TELEGRAPHY.

At a time when the first successful submarine cable has been laid across the Atlantic, and a second has been recovered from depths once thought unfathomable, many persons will be led to consider how far these great achievements, following on failures almost as great, have been due to mere good fortune, or to a real progress in knowledge. The object of this article is shortly to explain the advances which have lately been made in theory and practice by those who carry out the manufacture and submersion of telegraph cables. To make this explanation intelligible to the general reader, it will be well first to describe what a submarine cable is, and what are the functions it has to perform, although probably few who read this article will be so entirely ignorant of the subject as to suppose, with an ingenious correspondent of the *English Mechanic and Mirror of Science*, that the copper conductor is a long rope which slips backwards and forwards inside a gutta-percha tube, so as to ring a bell in America when pulled by the clerk in England.

The electrical conductor in a cable really is a copper rope in almost all cables now made, though a single wire is still sometimes used; when small, three wires generally form the strand; when larger, seven wires are used. Single wires were first employed, but they sometimes broke at a brittle part, and when large, were inconveniently stiff, tending to force their way out through the insulating sheath of gutta-percha. The seven wires of the strand never break all at one point, and the fracture of any one produces

\* Brussels, Arch. d. R., Pap. d'Etat. 67, fol. 66.

† Simancas, Est. Leg. 813.

no sensible effect on the conductor as a whole; for although the strength of a chain is limited by that of its weakest link, the conducting power of a wire or strand is in no way limited by that of its smallest section. The large Atlantic strand might be cut in two and joined by a short fine wire barely visible to the eye, without any difference being felt in the rapidity with which signals could be transmitted, or in the magnitude of the currents observed in the cable. The thin wire would produce no sensible effect, unless the length over which it formed the exclusive conductor bore some sensible proportion to that of the whole cable. Six, therefore, of the seven wires of a conductor may be broken in a thousand places without any injury to the cable, provided any one wire at each spot remains not wholly broken; nor is it, of course, necessary that this one wire should always be the same. Of course the seven wires forming the strand act as one conductor, and transmit only one message at a time.

The interstices between the several wires are filled with an insulating varnish known as Chatterton's Compound. The object of this varnish is to prevent the percolation of water along the strand, should any water ever reach it, and also to produce a more perfect adhesion between the strand and the gutta envelope, so that it becomes very difficult to strip off the insulator, even should it be cut or abraded. In older cables it was by no means difficult to pull the insulator off the copper in the form of a gutta-percha tube, and in great depths water was very generally found to have penetrated to the copper throughout its entire length. This was not necessarily fatal to the cable, for the water inside might be quite well insulated from the water outside, owing to the extreme minuteness of the pores by which it had gained access to the interior; but this water was the cause of serious difficulty and danger in joining a fresh piece of cable to an old one during repairs, and it was also probably dangerous by its tendency to produce an oxidation of the copper conductor. In cables as now made, there is no space for the water to lodge, and no water is ever found between the insulator and the copper.

The insulator employed in every cable of importance hitherto laid has been gutta-percha. The copper strand is passed into a vat of semi-fluid percha, and is drawn through a die of such size as to allow a convenient thickness of insulator to be pressed out round it. This first layer of gutta-percha receives a coat of Chatterton's Compound, and the process is repeated until the copper is covered to the specified thickness by a

succession of alternate layers of gutta-percha and compound. Three or four coats of each material are generally used; the largest wires with their insulating cover are nearly half-an-inch in diameter, the smallest in practical use for cables are about a quarter of an inch in diameter; but it is quite possible to cover in this way copper wire no thicker than a hair. The dangers encountered in this part of the manufacture are, impurities in the gutta-percha; eccentricity of the conductor in the insulator, leaving a dangerously thin coating of the latter; and, lastly, air-bubbles which may lodge in the insulator unperceived, and do serious injury. In time, water is certain to penetrate to these air-bubbles; it becomes partly decomposed, the gas generated bursts the bubble, and exposes the copper to the water. The slight leak thus formed is, by the action of the battery used in signalling, easily developed into a very serious fault. Fortunately, the manufacturers have been able almost, if not wholly, to prevent the occurrence of these dangerous cavities.

If the cable is to have only one conductor, as is the case in most long lines, the insulated wire is served or wrapped with hemp or jute, which acts as a padding between the gutta-percha and the outer iron wires used to give strength. This serving used to be tarred, but Mr. W. Smith pointed out that the tar was occasionally squeezed into small faults, and was a sufficiently good insulator to prevent their detection during manufacture, though not sufficiently good to prevent these flaws, under the action of the battery, from developing into serious faults. Since then, wet tanned hemp has been generally used. Outside the hemp serving come the iron wires, laid round and round the core, so as to give the whole the appearance of a simple wire rope.

These iron wires are very generally galvanized to prevent rust. In many cases they are further covered by a double serving of hemp, and a bituminous compound of mineral pitch, Stockholm tar, and powdered silica, patented by Messrs. Bright and Clark. This compound is used in the Persian Gulf Cable, the Lowestoft-Norderney (Hanover) Cable, and several less important lines, and seems to answer well. In other cases, as in the present Atlantic Cables, each iron wire is separately covered with a hempen serving, and the served wires are then laid round the core as before: the cable in this case looks like a hemp instead of an iron rope. Many other forms have been proposed, and a few adopted, but before these can be discussed, the duties which the cable has to perform, as a rope,

must be understood; and before entering on this subject, which is purely mechanical, it will probably be better to return to the insulated conductor and its electrical properties. Its form and materials have nominally undergone hardly any change since the manufacture of the first cable laid from Dover to Calais in 1851. The copper strand was substituted for the single wire in the Newfoundland and Cape Breton Cable laid in 1856. Chatterton's Compound was used in the cable between England and Holland, laid in 1858. The interstices in the copper strand were filled with compound in the Malta-Alexandria Cable, laid in 1861; and since that time absolutely no change has nominally been effected either in the form or materials used. Now, inasmuch as an overwhelming proportion of the cables laid in deep seas have failed, have we any right whatever to expect that cables will be permanently successful, of which the vital portion is nominally identical with that of the old Atlantic, the Red Sea, the Sardinia-Malta and Corfu, Sardinia-Africa, the Toulon-Corsica, the Toulon-Algiers Cables, which, in the aggregate, represent about 8000 statute miles of wire, which, after a more or less brief period of working, became wholly useless, as may be supposed chiefly from electrical defects? Did it not seem almost madness to attempt to cross 2000 miles, in depths exceeding 2000 fathoms, at a time when the only cable which could be cited as having worked satisfactorily for any considerable time in deep water, was a short length of the Malta-Alexandria Cable, lying in 420 fathoms of water? To the public, and to many engineers, it did seem hopeless; but the fact that it was precisely those persons who knew most of the subject that risked their reputation and their money, should prepare us to believe, that, although the name of the materials and the form of the insulated conductor remained unchanged, other changes had taken place which fully justified the confidence of the Atlantic projectors. The methods by which the perfection or imperfection of the cables were examined—the methods of testing, as it is called—have in fact made enormous progress, and it is to the discoveries and inventions in this branch of science that we owe both those improvements in the quality of the materials employed, and that certainty of detecting the smallest fault, which led so many practical engineers and electricians to a conviction of the feasibility of the great undertaking now so happily completed. It is on these electrical tests that a reasonable belief may be based of the probable permanence of the

two Atlantic Cables, and it is to these improvements that attention will now be directed.

The electrical tests employed for the first cables made were simple enough. It was necessary to ascertain that the copper conductor in the cable was unbroken, and fit to transmit an electric current. This was tested by placing a galvanometer in a simple circuit formed by the battery, the copper conductor of the cable, and the wire of the galvanometer. If the conductor was unbroken, a current passed from one battery pole to the other through the cable, and in its passage through the instrument deflected a needle. The stronger the current, the more the magnetized needle was deflected. If the conductor failed at any point, no current passed. It was also desirable to know that the conductor was insulated, so that no considerable portion of the current entering one end of the cable would be lost before arriving at the other end, where it would be required to produce a signal; to ascertain this the metallic circuit was broken—one pole of the battery remained connected with the conductor of the cable through the galvanometer wire; the other pole was connected with a plate buried in damp earth, the cable was put under water, and its far distant end was insulated. Thus the battery was ready to send a current into the cable, and would do so, if the cable were at any point connected with the earth. When the cable was well insulated, no current passed; if there was a fault, that is to say, a connexion between the copper inside the cable and the earth or water outside, a current passed and deflected the galvanometer needle. The test consisted simply in trying whether a current would pass through the conductor, and would be stopped by the insulator; the galvanometer being an instrument which showed the presence or absence of a current by its effect on a magnetized needle. Staunch conservatives may still be heard to sigh for the good old times when a cable was good if a needle stood upright, and bad if it leant to one side; when there were neither complications nor calculations to perplex or mislead any one.

These simple tests, when applied to long cables, had serious defects. Sir W. Thomson was the first to insist on the importance of ascertaining not only that some current would pass through the conductor, but that the greatest possible current did pass which could be expected with a conductor of given dimensions and material. The current which a given battery will produce, depends not only on the length and size of the conductor, but on the material of which it is

composed; roughly speaking, a given battery will produce a six-fold greater current in a long wire of good copper, than it will in an equally long wire of iron of the same diameter. The property of the conductor, determining the amount of current which will pass through it under given constant circumstances, is termed its resistance. The greater the resistance the less the current, and *vice versa*. Each metal and each alloy has its specific resistance, from which the resistance of any given wire may easily be calculated. It further happens that various specimens of commercial copper differ exceedingly in this electrical property, so that one copper wire will transmit double the current transmitted by a second, in similar circumstances, although to the eye the two wires do not differ. To this fact Sir W. Thomson drew attention in 1857. It might seem of little importance what the resistance of a conductor is, since the current can always be increased by increasing the power of the batteries employed; but Sir W. Thomson pointed out that the rapidity with which a succession of distinct currents such as are required to produce signals, could be made to follow one another through a long submarine cable, was, *ceteris paribus*, inversely proportional to the resistance of its conductor, so that the commercial value of that cable as a speaking instrument depended on this resistance, which could be diminished only by (at increased cost) increasing the dimensions of the conductor and insulator, or, without any sensible increase of cost, by simply selecting that copper which possessed the smallest specific resistance. This point is clearly explained in the following extract from a paper by Sir W. Thomson, published in the Proceedings of the Royal Society, June 15, 1857:—

‘It has only to be remarked that a submarine telegraph, constructed with copper wire of the quality of the manufacture A, of only  $\frac{1}{31}$  of an inch in diameter, covered with gutta-percha to a diameter of a quarter of an inch, would, with the same electrical power, and the same instruments, do more telegraphic work than one constructed with copper wire of the quality D, of  $\frac{1}{18}$  of an inch in diameter, covered with gutta-percha to a diameter of a third of an inch, to show how important it is to shareholders in Submarine Telegraph Companies, that only the best copper wire should be admitted for their use.’

As soon as it came to be understood that the value of a cable might be enhanced forty per cent. by a judicious selection of the copper employed, tests were adopted which should not only show that the conductor would transmit a current, but also that it

was the best conductor which could be procured of the dimensions and material chosen. In other words, the resistance of the conductor was measured.

Measurement implies comparison with some unit. The resistance of some special piece of wire at a given temperature may be taken as a standard ‘one unit,’ and the resistance of all other wires or conductors may be referred to this unit. This comparison was rendered possible by the discoveries of Ohm, published in 1827; measurements were made by him and his followers, Lenz and Fechner, in terms of arbitrary units, and Professor Wheatstone in 1843 published an elegant method of making these measurements, and then proposed the adoption of a fixed standard or unit of resistance. When, therefore, it was found desirable to measure the resistance of conductors, the means were not wanting, and were soon very generally adopted. For these measurements ‘resistance coils’ are required; these consist in a graduated series of fine wires of known resistance, which can be combined at will so as to give any multiple of the standard or unit that may be required; they are arranged in boxes, and fitted with stops, slides, or handles, so that the required additions or subtractions of resistance may be easily made. As early as 1847 or 1848, the Electric and International Telegraph Company in England, and Dr. Siemens in Berlin, used resistance coils for practical experiments connected with telegraphy; but it was not till 1857, during the manufacture of the last seven or eight hundred miles of the Atlantic Cable, that the copper was systematically selected. This example was followed in the Red Sea Cable, when the resistance of the conductor was regularly tested by Mr. Fleeming Jenkin at Birkenhead, and by Messrs. Siemens during the

Date.	Name of Cable.	Specific Resistance at 24° C. in British A.S.T. units.
1859	Red Sea, . . . . .	0.270
1861	Malta-Alexandria, . . . . .	0.264
“	Persian Gulf, . . . . .	0.247
1865	Atlantic, . . . . .	0.242
1866*	Lowestoft-Norderney, . . . . .	0.240
	Pure Hard Copper, . . . . .	0.231
	Pure Soft Copper, . . . . .	0.226

laying. The copper of the first portion of the Atlantic Cable was not selected in this manner, and was of very indifferent quality.

\* The writer believes that the 1866 Atlantic Cable has better copper than any of the cables in the above table, but he does not know the exact figure of merit.

Since then the improvement has been continual. Dr. Matthiessen reported to the Joint Committee appointed by the Board of Trade, and the Atlantic Company, in 1858, that chemically pure copper was superior to all alloys, and that the best copper for electrical purposes was to be obtained from Lake Superior and Burra-Burra, the worst from Demidoff and Rio Tinto. The gradual improvement since that date may be gathered from the foregoing table.

The smaller the figure in the last column the better the material; the last figure represents perfection. The specific resistance is the resistance of a foot of wire weighing one grain. The unit in which it is measured is that selected by a Committee appointed by the British Association in 1861, from whose yearly reports may be learnt the reasons for preferring this to other rival standards,—for it is by no means a matter of indifference what unit is employed.

The improvements in the methods and instruments used to measure resistance have far more than kept pace with the practical improvement of the material. Resistance coils would now be considered very bad if their normal values were inaccurate to the extent of one part in a thousand; they may be procured ranging from one unit to 100,000. The standards issued by the Committee above named profess to be identical in their resistance, without a greater error than one part in ten thousand. Still greater accuracy could be obtained if required, but the precautions necessary are then very numerous, as may be seen on consulting the various papers by various members of the Committee on Electrical Standards, published in the British Association Reports from 1862 to 1865.

A very wide gulf separates the present practice from the old plan of simply ascertaining the continuity of the conductor. Every hank of copper wire is tested for resistance even before it is spun into a strand. The resistance of the strand is measured by the engineers when covered with gutta-percha, and before being admitted to form part of the cable; for twenty-four hours previous to this test it is kept at a stated temperature. The conductor of the manufactured cable is also daily measured, less for the purpose of ascertaining its electrical properties than to ascertain its temperature from its observed electrical resistance, and also to check the length supposed to be in circuit when other tests are made. These tests are interfered with by variations of temperature, by slightly imperfect connexions, by the induction of the wire upon itself, and, after the cable is laid, by earth-

currents. But the precautions thus rendered necessary are well understood, and carefully observed in the case of all important lines. The quality of the copper enters into the engineer's specification with precisely the same numerical accuracy as its weight; it is referred to definite units; and no more frequent disputes arise between the contractor and engineer as to these measurements, than as to the weights of material supplied.

A further use of these measurements will be spoken of when treating of repairs; but for the present let us leave the tests of the conductor to consider those of the insulator. The conductor may have more or less resistance, and work worse or better in consequence, but if the insulation be defective, the cable may not work at all, and the tests of insulation are therefore the most important of all. The old rough test was defective in many ways. It was found that if large enough batteries were used, and care taken to obtain very sensitive instruments, some current might always be made to pass between the copper and the outside of the insulator; in other words, no insulator offers an infinite resistance to the passage of a current. It was not difficult to judge roughly whether the amount of leakage, as it might be termed, was serious enough to damage a cable; but unfortunately, small faults are apt with time to become large faults, and the rough method was quite useless as a means to detect small faults in long cables. As the cable increased in length, the leakage, even through a good insulator, became so considerable that two or three bad places would make no very sensible difference in the deflection observed; and the galvanometers used became less and less sensitive as their deflections increased, so that the addition caused by a moderate fault became imperceptible. Then the galvanometers were not constant in their indications, so that the deflection of to-day was a very imperfect guide as to the deflection to be expected to-morrow. The galvanometers used by different observers were seldom or never compared. Moreover, the batteries used varied, and their properties were not examined; little attention was paid to the temperature of the cable, although this has an immense effect on the leakage to be observed; finally, and worst of all, the cables were not immersed in water, and fifty faults might in that case exist in a cable without producing any sensible effect, either on this old rough test, or on any other. Under these circumstances, is it surprising that cables were laid which contained many serious faults, and that, after a short and uncertain period, depending



on many circumstances, they ceased to transmit messages? Is it unreasonable to expect that, under a system by which the existence of any sensible inequality in the insulation of a cable is rendered impossible, the cables recently laid may continue in perfect working order for an indefinite period? All experience has shown that sound gutta-percha retains all its valuable properties in deep or shallow water, completely uninjured by use or time. The only decay ever observed has been at bad joints, air-bubbles, or impurities.

It is, again, to Sir W. Thomson that we owe the first suggestion of an accurate method of testing the insulation of a cable. In 1857, in a lecture delivered to the British Association at Dublin, he pointed out that a so-called insulator was really a conductor of enormous resistance; that this resistance, though large, was measurable in terms of the same units as measured the resistance of conductors, and he then gave an estimate that the gutta-percha of the first Atlantic Cable had a specific resistance twenty million million times greater than that of copper at about  $24^{\circ}$  C. At his suggestion Mr. Fleeming Jenkin made systematic measurements of the resistance of the insulating sheath of the Red Sea Cable; and, independently, Dr. Siemens of Berlin had made similar arrangements for those measurements during the submersion of the cable. Unfortunately this cable was not tested under water, and these tests were therefore of little use, except to determine the properties of gutta-percha. Since 1859, every important cable has been tested on a similar system. The methods used have varied, but they have always resulted in determining the resistance per knot of the insulator. Attention has been paid to the temperature, any rise in which rapidly diminishes the resistance of gutta-percha. The necessary allowance for the different dimensions of various cables has also been made, and no test is now counted of any value unless made under water. The result is that definite numerical results are obtained, comparable one with another, whatever be the dimensions, length, or temperature of the cable, and whatever be the variations in the batteries or galvanometers employed. The work of one day is comparable with that of another; the results obtained in various factories, and by various engineers, are all comparable, and no considerable variation in the resistance of the insulator, such as would be caused even by a small fault, can possibly escape detection. The improvements in the tests have here also been followed by a great improvement in the quality of the materials,

as well as by increased security against faults. The specific resistance of the gutta-percha of last Atlantic Cable is twelve-fold that of the Red Sea gutta-percha; and at  $24^{\circ}$  C. may be roughly said to be 200,000,000,000,000,000 times that of copper (referred to equal dimensions).

It is difficult to find any comparison which will give a tolerably clear idea of the extraordinary difference between the electrical resistance of these two materials; it is about as great as the difference between the velocity of light and that of a body moving through one foot in six thousand seven hundred years; yet the measurements of the two quantities are daily made with the same apparatus and the same standards of comparison. This fact is well calculated to give an idea of the range of electrical measurements, and the perfection to which the instruments employed have been brought.

Resistance coils and the galvanometer variously combined allow these measurements to be accurately made in many ways. Sir W. Thomson's reflecting galvanometer is now almost exclusively used for this purpose. The simple deflection test is still frequently employed, but it is then reduced by calculation so as to give the results in resistance.

It would be out of place to attempt to explain in detail the modes of testing adopted, but it may be interesting to enumerate the several examinations which each mile of insulated wire undergoes before it is admitted to a cable.

1. The hank of copper wire is tested for resistance.

2. The resistance of the copper conductor of the insulated mile of wire is measured after having been kept for twenty-four hours in water at a constant temperature.

3. The resistance of the insulator is measured under the same conditions, once with a current from the zinc pole, and once with a current from the copper pole of the voltaic battery. The above tests are made by the contractor.

- 4, 5. The last two tests are repeated by independent observers acting as the engineers of the company.

6. The coil of wire is again tested for insulation immediately before being joined to the manufactured cable.

In addition to these tests, in many cases the insulation is tested in water under a great pressure, to simulate the pressure occurring at the bottom of the sea. This test was patented by Mr. Reid, and is probably of considerable service, although in the vast majority of cases the insulation resistance is increased by pressure. While a cable is

being submerged it is indeed customary to expect an improvement of about 7 per cent. for every 100 fathoms of water, due to this cause only; thus in 2000 fathoms an improvement of 140 per cent. is expected.

After the cable is sheathed with iron, it lies under water in large tanks; the resistance measurements are repeated daily, and the results compared with those calculated from the length and temperature of the cables. The effects of an increase of temperature in diminishing the resistance of gutta-percha have been separately examined by Messrs. Siemens, Mr. F. Jenkin, and Messrs. Bright and Clark. The results of the various experiments agree very closely. One curious phenomenon deserves mention: the apparent resistance of insulators increases materially while the battery is applied to them, and it is therefore necessary to note the time at which the observation is taken. In the earlier cables even this fact escaped notice. This extra resistance is said to be due to electrification; it ceases gradually after the copper conductor has been discharged by being maintained in electrical connexion with the earth, or with the opposite pole of the battery, but in the latter case it reappears as before, increasing as the application of the battery is prolonged. Its cause is not understood. It seems to be a kind of electrical absorption, and is first mentioned by Faraday in experiments on induction.

Enough has been said to explain the care and accuracy with which the insulation of a cable is now measured. The results obtained may be understood from the following facts. Not one-third per cent. of a current entering either the 1865 or 1866 Atlantic Cables is lost by defective insulation before reaching Newfoundland. Such loss as does occur indicates no fault, but is simply due to the uniform but very minute conducting power of the gutta-percha.

Again, if one of the cables be charged with electricity, and its two ends insulated, at the end of an hour more than half the charge will still be found in the cable. The conducting power of the two thousand miles of gutta-percha has been insufficient in one hour to convey half the charge from the copper to the water outside. Those who have tried to insulate the conductor of a common electrical machine well enough to retain a charge for a few minutes, will appreciate the degree of insulation implied by the above statement. Contrast these facts with the following extract from the lecture delivered before the British Association by Sir W. Thomson in 1857, at Dublin, and good reason will be seen for believing that

the rapid failure of the first cable is not likely to be repeated in the case of those now in use:—

‘The lecturer proceeded to explain that, when tested by the galvanometer, there was very little difference in the force of a current sent into 2500 miles of the Atlantic Cable, whether the circuit was or was not completed. This seemed rather hopeless for telegraphing’ (he continued), ‘where there was so much leakage, that the difference could not be discovered between want of insulation and the remote end. But if there were 49·50ths lost by defective insulation, it would only make the difference between sending a message in nine minutes instead of in eight.’\*

Sir William Thomson did not on this occasion mean to state that there really was no difference when the farther end was insulated or put to earth, but the instruments employed showed very little difference, and on a subsequent occasion only about one-fourth of the current which started was found to have arrived at the remote end. The difference now is not one three-hundredth part, and the current entering the cable where the remote end is insulated, is now, under the most unfavourable circumstances, not one-hundredth part of that passing when the remote end is put to earth, or, in other words, when the circuit is completed.†

\* From Professor W. Thomson’s lecture before the members of the British Association at Dublin, 1857, as reported in the *Glasgow North British Daily Mail* of 4th September 1857.

† The following data, supplied by Mr. Latimer Clark, Engineer to the Anglo-American Company, will be interesting to those who have made this subject their special study. The total insulation resistance of the whole 1866 cable, as it lies at the bottom of the Atlantic, is 1316 millions of British Association units, or, as Mr. Clark calls them, ohms. This is equal to 2437 ohms per knot after one minute’s electrification. The 1865 cable does not sensibly differ from the 1866 cable. Both lose half their charge in from 60 to 70 minutes. The increase of apparent resistance due to electrification is enormous; thus, after thirty minutes’ electrification the insulation resistance is more than 7000 millions of ohms per knot. Mr. Jenkin, in the Red Sea Cable, did not observe a greater increase than 50 or 60 per cent. due to this cause, and a similar amount has been generally observed on other cables. An increase of 200 per cent. for gutta-percha is perhaps unparalleled, although an even greater increase has been observed with india-rubber prepared by Mr. Hooper. While the cable was on board the Great Eastern, it behaved like all other cables as to electrification, rising, for instance, from 681 to 1051 per knot during thirty minutes, at 18·3° C., so that the increased effect of electrification must be due to the low temperature and high pressure. Mr. C. W. Siemens, in a paper published in the British Association Reports for 1863, arrives at the conclusion that 24° C. pressure does not affect the change produced by electrifica-

Probably the imperfection of the old cable was due rather to the joints between the separate miles of wire as manufactured, than to any extreme inferiority in the gutta-percha employed. These joints are even now the weak places in the protection of a cable. When the gutta-percha has been selected and purified with care, and applied by mechanical contrivances of proved excellence, there is little risk of a fault occurring; but this manufacture cannot be so conducted as to produce one unbroken length of wire, and even if it could, convenience in the other processes of manufacture would require the division of this wire into lengths. One-mile lengths are, in practice, usually made without joint, and are joined together by a skilled workman as occasion arises. The copper strands are soldered together with a scarf-joint, two pieces of fine wire are then wrapped over this joint, so that even if it is pulled asunder, electrical continuity will be preserved, and so far the operation is one of no great difficulty. This cannot be said of the next process, the insulation of the wire by hand, and the welding, as it were, of the new sheets of gutta-percha, so applied with the old sheathing on either side. The gutta-percha is warmed by a spirit-lamp; too much or too little heat is fatal, and the joiner must judge of the temperature by experience; the least moisture will spoil a joint,—hence one reason for providing that no moisture can percolate along the metal strand. A very little dirt or impurity will also do much injury,—hence the rule that a joiner must do no other work, and that the copper wire must be soldered by one man, the gutta-percha applied by another. A joint may also be spoilt by the presence of air under one of the insulating coats, and as the writer cannot pretend himself to make a joint, other causes of failure probably exist of which he is ignorant, but enough has been said to show the difficulty of the process. Fortunately, joints can now be tested apart from the rest of the cable. In old times when a joint had been made the whole cable was tested; if the leak from the new joint was inconsiderable in comparison with the loss from the whole cable, perhaps some hundred miles long, the joint was supposed to be good, although, perhaps, it may have

allowed a greater loss in its few inches of length than occurred from some miles of sound cable. A bad joint seldom does more than this at first, but in time it becomes brittle, cracks, leaves the sound gutta-percha at each side, and, finally, allows the water free access to the strand. Joints of this character have been found in considerable number in old cables, and especially in the old 1857-58 Atlantic Cable. Some of these present an appearance of extraordinary carelessness, even the copper strands being imperfectly joined. It is almost certain that the final failure of the 1858 Atlantic Cable was due to one of these joints in which the copper was imperfectly joined; the wires were pulled asunder when the cable was being laid, they came together again when the strain was removed, but the points of contact soon were oxidized, and all communication ceased. Mere loss of insulation hardly ever entirely stops signals.

The test now employed shows whether a joint is as good as any equal length of the wire, and all joints which do not reach this standard are mercilessly cut out. First the joints to be tested are allowed to soak in water for twenty-four hours, then they are placed in an insulated trough of water connected with a Leyden jar of large surface, the cable is charged with a powerful battery, and a little electricity leaks out through the joints into the insulated trough. If the joint is good, this leakage is so small that the current produced by it could not be shown by the most sensitive galvanometer, but after a minute or two minutes, the insulated trough and Leyden jar will be charged by the gradual accumulation of electricity which has slowly leaked through the joint. If this be now discharged through a galvanometer, it will produce a sensible effect, and can be measured. In fact, the leak which was too small to be directly perceptible, is not only perceived, but its amount ascertained by measuring the quantity which accumulates from it in a given time. This test is due to Messrs. Bright and Clark. Other tests of a similar nature have been proposed, but have been found less convenient. The first test for a joint, distinct from that of the whole cable, was, it is believed, proposed by Mr. Whitehouse. No instance has yet occurred of failure in a joint which has successfully passed the accumulation tests above described. There are about two thousand joints in each Atlantic Cable.

Any further description of the various tests would only be wearisome. There are tests of charge, of discharge, of the effects of electrification, of the effects of positive

tion. The resistance of the copper conductor of the 1865 cable is 7604, that of the 1866 cable 7209, corresponding to 4.009 and 3.893 per knot respectively. The mean insulation resistance per knot, as measured in the factory at 24° C., was 379 millions, after one minute's electrification. All the resistance measurements are given in British Association units.

and negative currents, tests with statical electricity as well as voltaic currents; but enough has been said to show that the examination of a submarine cable, as now conducted is not guess-work, or even a matter of experience and skill; it consists simply of a long and laborious series of exact measurements, so expressed in figures that all electricians can understand the results, and compare them with those obtained from other cables, or by other observers. In this lies our safety.

Granting that the production of a perfectly insulated conductor 2000 miles long is no longer a matter of chance, can we protect and lay this wire with equal certainty in such depths as the Atlantic presents? or do we here fall back into a region of mere good or bad luck? As to shallow water, the question need not be asked. No serious strains occur, and the submersion of the cable depends on a few simple mechanical arrangements which have long since been perfected. Even in deep water, cables have not broken during the laying nearly so often as is supposed. Some very early Mediterranean expeditions, a later attempt to join Candia with Alexandria, and the experimental trip of the first Atlantic expedition, give almost the only instances where a cable parted suddenly during submersion; but it must be allowed that the strains endured in passing over depths of 2000 fathoms approached far too nearly to the breaking strain of the cables, and it is by no means impossible that some cables may have been injuriously stretched, although they were not broken.

In order to lay a cable of any construction taut along the bottom of the sea, it is necessary to restrain its free exit from the ship by applying a retarding force nearly equal to the weight of a length of the cable, hanging vertically from the ship to the bottom of the sea. Cables of the old form, in which simple iron wires were laid round its core, would support from 4000 to 5000 fathoms of themselves hanging vertically in water. They could, therefore, be laid fairly taut in depths of 2000 or 2500 fathoms, such as are met with in the Atlantic, but engineers are in the habit of allowing a very much larger margin than the above. They make all their structures from six to ten times stronger than by exact calculation they need be. This figure 'six' or 'ten' they call the co-efficient of safety. A co-efficient of safety of 'two,' such as was given by these old cables, gave very little safety indeed. When the cables are not laid taut, but with a certain slack, the strain need not be quite so great. The friction of the water tends to relieve the strain, but this relief with the old smooth cables was small.

Sir W. Thomson was again the first to give the true theory of the strains which occur, and the curve assumed by the rope during submersion. The first account of the theory appears in the *Engineer* newspaper of October 1857.

A much more elaborate investigation was, independently of Sir W. Thomson's theory, made by Messrs. Brook and Longridge, whose able paper was published in the *Transactions of the Institution of Civil Engineers* for 1858. Dr. Siemens of Berlin independently arrived at similar conclusions; the subject is nevertheless not a very simple one, for the Astronomer-Royal was misled more than once in his investigations concerning it.

When the ship and cable are both at rest, the latter hangs in a simple catenary curve, the strains on which are easily computed; but when the cable is being paid out, it lies in an inclined straight line from a point a very little below the surface of the sea to the bottom (provided, however, the cable as it lies at the bottom is not strained); above the water the cable hangs in a short catenary; the angle at which the cable lies in the water depends on the speed of the ship, and the specific gravity of the cable; it is independent of the strain on the cable, and is therefore unaltered whether the cable is being paid out slack or taut. As the speed of the ship increases, the angle which the cable makes with the horizon diminishes; the same effect is produced by diminishing the specific gravity of the cable—that is to say, by increasing its bulk relatively to its weight. The Atlantic Cable, under the water, probably lay at an angle of nearly  $7^\circ$  with the horizon; on leaving the ship, the angle was  $9\frac{1}{2}^\circ$ . In this case, in a depth of two miles, a length of from  $16\frac{1}{2}$  miles cable would lie in the water between the point where it left the ship and that where it touched the bottom. The weight of this cable, weighed in water, would be 231 cwt.; fortunately, as the cable would break with about 153 cwt., only a very small part of this weight is borne by the cable itself as it leaves the ship. Even if the cable were to be laid absolutely taut, a restraining force of 28 cwt. only would be necessary. In practice, 12 cwt. to 14 cwt. was found quite sufficient.

The cable, as it leaves the ship, may almost be said to lie on a long inclined plane of water; if it lay on a solid inclined plane, without friction, it might, by a well-known law of mechanics, be balanced by a length of itself hanging vertically from the apex of the inclined plane to the bottom, and this is almost exactly the strain required to be given by the break on board ship to balance the

cable, or, in other words, to prevent it from shooting back along the inclined plane, so as to lie slack in folds at the bottom; but the inclined plane of water is not at rest, it yields under the cable at every instant, at every spot; yet if the cable were pressed through the water, so that the water yielded before it, but did not slip along it at all, the analogy of the inclined plane would be quite perfect. The resistance of the water to displacement would supply the component of the whole force required, perpendicular to the direction of the cable, exactly as in the case of a solid plane; but, on constructing a diagram, it will at once be seen that the cable, as it descends, slips a little along the plane, and the friction of the water opposing this slip, slightly diminishes the strain required to lay the cable taut. If, on board ship, this full strain is not produced by the breaks, the cable slips still faster back along the inclined plane, and with such a velocity that the friction of the water on the cable makes up for the insufficient tension given by the breaks, and equilibrium is again restored, but at the expense of a waste of cable. It will be clear that, with a given depth, the greater the length of cable in the water, the less need this waste be, for the friction will be directly proportional to the surface; further, for the same reason, the waste will be less the more bulky the cable, and the rougher the surface. With the old iron cables of small diameter and smooth surface, very little advantage was gained by diminishing the strain on the breaks below that due to the full depth of water; a very slight relief of strain was followed by a perfect rush of cable out of the ship, and a loss of twenty or twenty-five per cent. was followed by a comparatively small diminution in the risk of fracture. In the cables of the Atlantic class, the bulk relatively to the weight is very greatly increased by enveloping each iron or steel wire in a separate covering of hemp, before laying them round the gutta-percha. These cables lie at a much smaller angle with the horizon, they offer a much larger and rougher surface than the simple iron cable, and consequently the friction, as they run back on the inclined water-plane, is very much larger. With cables of that class it becomes practicable and desirable to diminish the strain produced by the break much below that due to the full depth of water. Slack to the amount of twelve or fifteen per cent. diminishes the necessary strain on the breaks by more than one-half, and the importance of this relief can hardly be over-estimated. It actually becomes practicable to disregard the depth over which the ship is passing. The breaks

may be set to give the strain thought desirable, and the cable will then take care of itself. In shallower water, less slack will be payed out, in deeper water more, but the amount is never excessive, and can at any time be diminished by increasing the speed of the ship, which, by diminishing the angle at which the cable lies with the horizon, augments the effect of the friction of the inclined water-plane. This effect must not be confounded with the effect that would be produced by a buoyant substance attached to the cable. The hemp is no lighter than water, and does not tend by its buoyancy to carry any part of the weight of the cable, but it increases the bulk, and therefore increases the resistance of the water to displacement, and both directly and indirectly increases the surface friction.

The strain on the new Atlantic Cables during submersion was from 12 to 14 cwt.; their strength is 150 or 160 cwt. Here there is a co-efficient of safety of ten instead of two or four. The first cable out of the water weighed little more than half as much as the new cables; in water, it weighed more than they do. Its strength was 80 cwt., and the maximum strain during its submersion was nearly one ton; the ordinary strains varied from 1500 to 1900 lbs.

From the figures, we may learn the progress which has been made in the mechanical construction of the cables, and the diminished risk which attends their submersion.

The history of the several attempts to lay the cables helps to show the progress made in the construction, and bears out the conclusions as to the improvements effected. In August 1857 a first attempt was made to lay an Atlantic Cable; 330 knots were laid, starting from Valencia. Then the cable broke, the indicated strain being about 27 cwt. The retarding friction on this occasion was produced by two blocks of wood which were clamped round a small drum. Before the next attempt the Appeld break had been invented, and with the sanction of Mr. Penn, Mr. Field, Messrs. Easton and Amos, Mr. Lloyd, Mr. Everett, and Sir C. Bright, it was applied to the paying-out machinery. This break is an excellent contrivance, by which the required strain is readily produced and maintained unaltered; the retarding friction being quite independent of the condition of the rubbing surfaces. This break was successful, and has been used ever since. The 1858 expedition began operations on the 25th of June by a splice in the middle of the Atlantic, joining the cables contained in the 'Niagara' and 'Agamemnon.' The cable fouled the 'Niagara,' and broke. A second splice was at once made, and successfully

lowered to the bottom. When the Agamemnon had paid out 37½ miles, and the 'Niagara' 43 miles, the electrical tests showed that the copper conductor of the cable was severed. In technical language, there was a loss of continuity. The 'Niagara' endeavoured to haul in the cable, which shortly broke for the third time. On the 28th of June another splice was made; but after 111 miles had been paid out, the cable broke for the fourth time, with a strain indicated of 2200 lbs., or nearly one ton. On the 28th of July another splice was made, and this time the cable did not break, but was laid successfully as a mechanical operation, but unsuccessfully in all other senses. As before stated, a want of continuity did occur, but it ceased after a few hours, and was passed over as of insufficient consequence to stop the submersion.

Much surprise has been expressed at the rupture of a cable estimated as strong enough to bear four tons, when the indicator showed only about one ton. It has frequently been suggested that the instrument gave false indications; but there is really little reason for supposing this. The cable was covered by 126 small iron wires, spun into eighteen small strands, the whole cable being only 5-8ths of an inch in diameter. The wire was not galvanized, and rusted very readily. It is most probable that in many places its theoretical strength was very much reduced by this cause.

In 1865 and 1866 the same break and indicator, or dynamometer, as it is sometimes called, were used, but the history of events was widely different. The cable, during submersion, not only escaped fracture, but was not even once strained within a tenth part of its supposed strength. In 1865, the occurrence of a small fault, which would have been far too insignificant to have been detected in 1857 or 1858, caused an attempt to haul back the cable, which was broken by chafing against a projection from the bows of the 'Great Eastern.' The arrangements in 1865 were by no means perfect. The picking-up gear was defective, and the system of electrical tests faulty, but the paying-out machinery acted admirably, and the cable hardly admitted of improvement. In 1866 the picking-up gear was good, and the electrical arrangements left nothing to be desired.

The special form of cable adopted, in which each iron wire is enveloped in hemp, presents various interesting peculiarities. It is actually stronger than the sum of the strengths of the hemp and steel employed to make it. This almost incredible paradox was discovered during experiments made by

Messrs. Gisborne, Forde, and Siemens for the Government, with reference to a proposed Falmouth and Gibraltar Cable. It seems strange enough that a steel wire can be strengthened by wrapping hemp or manilla round it; but this was soon found to be a fact, and indeed the percentage of elongation undergone by a hempen strand and a steel wire before breaking are by no means so different as most people would imagine. By selecting the best lay of the hemp round the steel, it was repeatedly found that the strength of the two combined exceeded the sum of the strengths of the two separately, and this strange result has been fully confirmed by independent experiments conducted by Mr. Fairbairn and others for the Atlantic and Telegraph Construction Companies. The explanation is simple enough. Neither material is really homogeneous: each has its weak places; it is extremely unlikely that the weak places of both should coincide. When, therefore, the two are combined, we obtain the sum of the average strengths of each material; when they are tested separately, we get the sum of the strengths of the two at their weakest points.

This form of cable was first used in 1860 for a cable between France and Algiers, Messrs. Gisborne and Forde being the engineers, and Messrs. Glass and Elliot the contractors. The cable, after some misadventures, was successfully laid, and behaved well during submersion, but the form fell into some discredit, owing to the discovery that even in 1500 fathoms the hemp was eaten away by a species of teredo after a few months of submersion. This left a mere cage of loose iron or steel wires, unfit to be lifted, or relaid if lifted. Fortunately it appears that these animals, which in the Mediterranean fasten on every inch of exposed hemp, do not exist in the Atlantic. Where they have eaten the hemp, the gutta-percha appears as if marked with the small-pox; but no instance has yet occurred where they have actually penetrated the gutta-percha to any serious depth.

The form has other defects. Many persons think that the two injuries which the 1865 cable received during submersion were not due to malice, but to short pieces of broken wire, which would penetrate the soft sheathing of hemp with much greater ease than the hard mail of the common iron-covered cable. The arguments used in favour of this view are as follows:—The hemp conceals a break in the wire which it encloses; a broken wire may be bent out when being coiled, and penetrate the neighbouring coil; the injury may not occur, or not be fully completed, until the coils are disturbed by the tramp-



ling of the large number of men engaged on the coil when it is being payed out. Pieces of broken wire were found actually sticking out in this manner after attention had been drawn to the possibility by the faults which occurred. Probably, however, the great success of the Atlantic Cables will cause their form to be the type for deep-sea lines for some time to come.

Cables on board ship are now almost invariably stowed in water-tight tanks; from these they pass up to a sheave or quadrant over the centre of the coil, and thence to the break-drum, and over the stern. A turn or twist is put into the rope at every turn which it makes round the tank; that is to say, it is twisted tighter by the mere action of coiling away; but this twist is again taken out when the cable is uncoiled; so that if this operation proceeds with regularity, the cable goes into the sea in the same condition as it left the sheathing-machine; but if the cable is stiff and springy, or if it is drawn from the hold by jerks, or if one or two coils stick together and are drawn up at once, the turn in the cable tends to throw it over into a loop, which may easily be squeezed or drawn into an ugly-looking thing called a kink. With circular coils, and experienced men in the hold, this hardly ever occurs, and it is rendered next to impossible if the eye of the coil is filled up by a smooth cone, to which the rope clings in ascending, and which prevents any coil from being drawn into a loop. This cone, together with certain guiding-rings which prevent the cable from flying out under the action of centrifugal force, form the subject of a patent taken out by Mr. Newall, and first used in 1855 for the Varna-Balaelava Cable. The excellence of the contrivance hardly admits of a doubt; but the action of the Patent Laws receives some curious illustrations from the incidents which this patent has given rise to. The validity of the patent has been greatly contested; substitutes more or less like the thing patented have been devised, but rival manufacturers have seldom consented to use the thing patented, and pay the royalty. Although the holds were arranged with contrivances having the same object as Newall's cone and rings, foul flakes, as they are called, twice came up from the hold, once on each expedition. These foul flakes are simply two or more turns of the cable which come up entangled together, and then get jammed into more or less of a tangle on deck, for round the break drums they cannot go. The cable has to be stopped at once, the ship's engines reversed, and all hands busied in setting the mischief to rights. The following extract from a speech delivered at Glas-

gow by Captain Hamilton, who accompanied the expedition as a Director of the Atlantic and Anglo-American Companies, gives a graphic description of the foul flakes which occurred during the laying of the 1866 cable:—

'This interruption occurred in consequence of the cable, which was being payed out from the after-tank, bringing up with it a bight from the next lower flake, and also the lead from the inside to the outside of the next layer of the coil, so that five cables were running out from the tank instead of one.

'These were carried aft together till they were stopped by the paying-out machinery; when, in a very short time, they appeared like the tangle of a gigantic fishing-line. The ship was immediately stopped, but the night was pitch dark, rain falling heavily, and a fresh breeze blowing, the cable over the ship's stern being only visible by a slight phosphorescent light where it dipped into the water. Sir James Anderson, however, by great skill, contrived so to handle his ship of 23,000 tons, which was riding at single anchor in 2000 fathoms by a mere thread, that the engineers and sailors had time to reduce this apparent confusion to order, and in about three hours the paying-out was resumed without the perfect testing of the cable having been in the slightest degree interfered with.\*

160 or 170 miles of cable were payed out daily during the 1865 Atlantic expedition, and from five and a half to six and a half knots per hour may be considered a good speed in cable-laying. In 1866 the speed was rather slower, the distance was generally about 120 miles per diem, and the cable payed out about 135 miles. The 1865 and 1866 cables are 1896 and 1858 nautical miles long respectively. The total distance from shore to shore is 1670 nautical miles. The 1858 cable was 2022 miles long, and it was payed out as fast as in 1865, but more cable was wasted, and the ship went slower. A footnote gives the principal dimensions and weights of these cables.†

\* From the *Glasgow Daily Herald*, 5th November 1866.

† *First Atlantic*.—Length as laid, 2022 knots; copper conductor 7-wire strand, weighing 107 lbs. per knot, diameter 0.033 in.; covered with gutta-percha, weighing 260 lbs. per knot, diameter, 0.38 in.; served with tanned hemp, and covered with eighteen strands of seven bright charcoal iron wires 0.028 in. diameter; total diameter of cable 0.62 in.; weight of cable in air per knot 21.7 cwt.; in water 16.3 cwt.

*Second, or 1865 Atlantic*.—Length when complete in 1866, 1896 knots; copper conductor 7-wire strand weighing 300 lbs. per knot; diameter 0.114 in.; covered with gutta-percha and Chatterton's Compound, weighing 400 lbs. per knot, diameter 0.464 in.; served with wet tanned hemp covered with ten bright steel wires, each enclosed in five tarred manilla hemp strands, diameter of each wire

There are some popular fallacies connected with cable-laying which are exceedingly tenacious of life—one is, that inasmuch as the wires are laid round a cable like a corkscrew, they will stretch a great deal before supporting the cable, and so the core will be injured by having to support a considerable part of the strain. In point of fact, nothing of this kind occurs. The iron wires abut one against the other, and form a tube which cannot diminish in diameter as a corkscrew does, or would do, if made of soft wire; and experiment shows that an iron-covered cable stretches very little more than a simple straight iron wire. Cables of the Atlantic class stretch a little more, for the soft strands are compressible; but even in this class of cable, the elongation, with half their breaking strain, is quite insignificant, and with the strain actually used it is insensible. Then some people say these cables untwist, and they certainly do a little, but the cables recovered from great depths prove that the number of turns which are thus taken out of a cable are quite insignificant, producing no sensible elongation or change in the lay. Others think the rise and fall of the ship must cause sudden jerks and great changes in the strain on the cable as payed out, and quite a small army of patents stand ready to defend the right of inserting some elastic contrivance by which the cable is to have a certain play. Probably the see-saw which these contrivances might introduce would be far more dangerous than the evil they are designed to remedy, for in truth the strain changes very little even in heavy weather, so long as the ship is going fast enough to let the cable lie at a small angle with the horizon. When the cable hangs vertically the case is different, though even then the change of strain is much less than would be supposed. With the 'Great Eastern' as a *point d'appui* the variation was hardly sensible. Another array of patents defends the privilege of laying a cable through a long auxiliary tube, or with a long auxiliary cable; four patents for this contrivance were taken out in 1857. Other gentlemen wish to tack floats on to the cable; others, parachutes; others, gum and cotton, so as to buoy the cable up for some time; then the gum or glue dissolves, and lets the cable down quietly. It is both amusing and sad

to read these and many other contrivances. Surely the man who makes a bad invention, and believing it to be good, spends his life and his fortune in the vain attempt to achieve an impossible success, is almost as fit a subject for commiseration as the real inventor who fails to reap his just reward; and then the former class are much more numerous than the latter.

The machinery now in use for laying cables acts extremely well; if the cone and rings were in general use, no further improvement would be required. An experiment by Messrs. Siemens Brothers to use a reel mounted on a turn-table in the ship's hold, and driven by a steam-engine, deserves notice, and to some extent praise, as, at any rate, an experiment out of the beaten track; but the experiment was not successful. Captain Selwyn has proposed a floating reel, the speed of which would be regulated by the floats of paddle-wheels; but contractors who have achieved success by the old plans will be slow to tempt fortune by trying these novel contrivances. It will be seen that very little improvement has been made in the paying-out machinery of late years, simply because it was not wanted. The cone and rings date from 1855; the Appold's break from 1858; water-tight tanks were first made in 1858 for the Red Sea Cable, but first used by Messrs. Gisborne and Forde for the Malta-Alexandria Cable in 1861. Since then, no material change has been made in the arrangements.

It is far otherwise with the electrical tests during submersion.

The object of tests during submersion is twofold: *first*, to detect instantly any injury which may occur; and, *secondly*, to ascertain the position and nature of the injury. Time is of extreme importance in these tests. Faults on board almost always are caused at or near that part of the cable which is in the act of leaving the ship. That is the only portion which is being disturbed, and it is hardly possible that a change can take place elsewhere. If the fault be instantly detected, the ship stopped and the cable arrested as speedily as is consistent with safety, the fault may be retained on shipboard, or if it pass into the sea, only a short length of cable will have to be hauled back before the faulty portion is recovered. As soon as it is quite certain that a fault exists, and the necessary steps have been taken to prevent the cable from running uselessly into the sea, means must be adopted to ascertain where the fault is. One rough method is to cut the cable in the hold near the part being payed out, and then by examining successively the portions in the ship and in the

0.095 in.; diameter of strand 0.28 in.; diameter of cable 1.125 in.; weight of cable per knot in air, 35½ cwt.; in water, 14 cwt.

*Third, or 1866 Cable.*—Length as laid, 1853 knots; similar to 1865 cable, except that the steel wires were galvanized and the manilla strands were not tanned but left white. Weight in air 31 cwt., in water 14½ cwt.; breaking strain, 8 tons.

sea, to determine whether the fault is still on board; but electrical methods exist by which, before or after the adoption of this simple examination, the position of the fault can generally be fixed with considerable accuracy. Few statements concerning telegraphy excite more surprise than this does; few people know that accurate measurement of electrical phenomena is possible; some even think that electricity is an agent almost capricious in its action; but those who have learnt that the electrical properties of a conductor or an insulator are susceptible of definite numerical expression, should feel no surprise on hearing that when the electrical properties of a submarine cable of uniform construction are observed to undergo a definite change in virtue of some alteration at some one point, it is quite possible to make such a series of measurements as shall fix the position of that point. There are only two unknown quantities, and whenever by experiment equations can be obtained, including these unknown quantities, they can be determined. Quitting generalities, let us try to show how this is done. We will first suppose that the simple insulation test has shown that the conductor is no longer fully insulated.

A measurement must be made of the resistance of the conductor intervening between the ship and the sea at the fault or earth, as, oddly enough, it is always technically called. If this measurement give 40 units, and the resistance of each knot of the cable is already known to be 4 units, the observer will know that the fault cannot be more than ten miles off. It has already been stated that the electrical resistance of a wire or conductor can be measured with extreme accuracy, and that, as the resistance is proportional to the length, the length in circuit can be calculated from the resistance. Still, from our one measurement, we have not got information enough to know certainly where the fault is,—we only know that it cannot be more than ten miles off; it may be less, for the fault itself may have a certain resistance, and about the fault we as yet know nothing. But suppose we can now obtain a similar measurement from the other end of the cable, and this gives 600 units, while the whole length of the cable is 150 miles, we shall then know that the fault is five miles from our end, and has a resistance equal to 20 units; the resistance as measured from our end consists of five miles of conductor and the fault, or 40 units in all, that from the other end consists of 145 miles of cable and the same fault, or 600 units in all, and no other position or resistance of the fault will agree with the two observations made. A

comparison with a pipe of water may make this clearer to non-scientific readers. Let us take a pipe 150 yards long, and suppose that we know exactly how much water will run through any given length of a pipe of that diameter from given cisterns at each end. Now, suppose a leak to occur in that pipe: if we stop up the far end, and let the water run in from our cistern, we find that as much water runs out as would be allowed to pass by a pipe ten yards long, we then stop up our end of the pipe and let water run in from the far cistern. We find as much water is conveyed away as would be allowed to pass by a pipe 150 yards long; then, as in the electrical case, the leak in the pipe must clearly be five yards from our end, and it must have a resistance equal to that of five yards of pipe. Thus the position of a leak in a water-pipe might be discovered, although the leak itself were buried in the ground. The electrical experiment is quite analogous to this, and is in practice made much more easily than the experiment with water-pipes could be made, for the laws of the flow of water in pipes are much less well understood, and less simple than the laws of the flow of electricity, although we may think we know better what water is than what electricity is.

In cables containing more than one wire, the above test, or something analogous to it, can always be made, for the faulty and good wire being joined together at the distant station, can be treated as one conductor, of which the observer has two ends in his possession. He can then arrange his test so that his observations at both ends are really simultaneous with the fault in the same condition when added to the two circuits. In this case, a test based on the above principle is quite perfect, and will fix the position of a fault with great nicety. But where the cable has only one conductor, the two tests must be made by different observers at different times. Faults have a disagreeable art of varying very rapidly, so that their resistance is never the same for two minutes or fractions of a minute, and then the test becomes inaccurate, though not actually useless. For instance, the observer in the first case might feel quite sure that the fault was not more than ten miles off, even if he got no information from the other end; if the fault were caused by a nail joining the copper and iron of the cable, it would have no sensible resistance, and the above test would show it was exactly ten miles off. Even if the cable were broken, the observer could guess from the variation of the fault, the current it returned, and other peculiarities, whether it was likely that the fault had much resistance, and thus form by the aid

of experience a fair guess at its exact position.

The measurement of resistance is far from being the only test of which the results can be expressed with numerical accuracy; for instance, the statical tension at any point of the wire, its potential, as it is called, can be measured by electrometers, and indirectly by various methods. This statical tension is the quality, in virtue of which one electrified body attracts or repels another more or less strongly. When a current is flowing from a battery through a conductor to earth, the potential gradually decreases from a maximum at the battery to zero at the earth, and decreases according to well-known laws. The observation of this potential at any point gives additional information, therefore, by which the condition of the conductors may be determined. To revert to the analogy of the water-pipe, the potential would be represented by the pressure per square inch, or head, inside the pipe at each point; it would be greatest near the cistern, and gradually decrease to nothing at the mouth of the pipe where the water was discharged.

Another class of fault is more easy to manage. If by accident the pipe got choked up instead of having a hole in it, nothing would be easier than to tell where the obstruction lay, by measuring the quantity of water we could pour into the pipe before filling it. Then knowing the capacity per unit of length, we could calculate the distance by simple division. Exactly so the capacity per unit of length of an electric cable for electricity can be, and is measured, so that if the conductor is broken inside the insulating sheath, without a fault of insulation occurring, the distance of such a fault can be obtained by a simple measurement of the charge which the insulated conductor will take. In short, we can measure current, resistance, potential, and quantity. What is to be measured depends on the nature of the fault observed; but from these measurements, or some of them, wherever they can be made simultaneously at each end, the position of the fault can be fixed. Unfortunately, no system of tests on one side of a fault can give its position. A bad fault far off, and a small fault close at hand, cause all the elements which can be observed to vary simultaneously, so as to give no clue as to which has occurred. A bad fault, or one with little resistance, can have its position fixed on the assumption that it has no resistance; but a slight fault absolutely requires the distant test before its position can, even approximately, be determined. Fortunately, signals from the distant end can

always be sent past such a fault. We are now in a position to consider the tests hitherto used during laying, and the improvements used on the Atlantic expedition.

In very early days people were satisfied if they could speak through a cable whilst it was being laid. Then came the simple insulation test at definite times. Then more complex tests, spaced off into five minutes of this, ten minutes of that, and six minutes of the other, so that each hour was cut up into complex fractions, during which the ship and shore had simultaneously to make more or less complicated changes. If a fault was detected during one arrangement, perhaps half an hour would elapse before the time for speaking and either sending or receiving intelligence would come round. Or, worse still, a fault might occur and not be detected because the connexions at the time were arranged for speaking, or for a mere test of continuity, etc. Then blunders would arise from time not being perfectly kept, or from some of the many changes having been incorrectly performed, so that probably this plan was practically inferior to a simple insulation test permanently maintained. It was, moreover, rigid, and could not be readily altered to suit the special tests required when a fault did occur. All these defects were remedied for the first time during the Atlantic expedition of this year. The end of the cable at Valentia was not quite insulated; it was connected with the earth through an enormous resistance, so great that the insulation test of the cable was hardly sensibly affected by the small leakage through it; but this small leakage was easily perceived by an astatic Thomson's reflecting galvanometer. When, therefore, an insulation test was being made on board the 'Great Eastern,' the current used was perceived at Valentia, where the observer could further judge of the tension or potential produced by the 'Great Eastern's' battery by observing the current it would produce through his enormous, but known resistance. Any fault would lower that potential, and reduce this current at Valentia. More than this, the 'Great Eastern,' by slightly decreasing or increasing their battery, could cause such small changes in the current observed at Valentia as should serve as signals, and this without intermitting their insulation test. Conversely, Valentia, by drawing off little charges, or adding them, could produce effects similar to slight changes in the insulation of the cable, and those effects could be used as signals from the shore to the 'Great Eastern,' being of short duration, and definitely arranged, they could not be mistaken for faults. Thus simultaneous and continu-

ous tests could be made on ship and on shore. Nevertheless, conversation could be carried on in either direction, at any time. No fault of insulation would escape detection, even during conversation, and as soon as it did occur the instruments were ready arranged to make those simultaneous tests by which alone its position could be determined, and then to transmit that intelligence from one end to the other. The merit of this admirable invention is due to Mr. Willoughby Smith. The details of the arrangement actually adopted were written out by him, in concert with Sir W. Thomson and Mr. Cromwell F. Varley, whose valuable assistance had been given to the Atlantic Company from the time of the failure of the 1858 cable.

The above description of Mr. Smith's invention is not strictly accurate as applied to the arrangements used during the expedition, but the leading idea remained unaltered. Thus the Wheatstone balance was used to measure the insulation resistance in definite units, instead of the simple deflection insulation test. The bridge was arranged with what Sir William Thomson calls a potential divider, a set of resistance coils giving 10,000 equal subdivisions by the mere sliding of two contact pieces. Continuity is never lost, nor the resistance changed, in these slides,—a considerable practical advantage. A special galvanometer was introduced to test continually the constancy of the ship's battery, without which constancy the potential tests would have been much diminished in value. On shore the potential produced by the ship's battery was measured by two methods perhaps more accurate than the deflection, through Mr. Smith's galvanometer and large resistance. One method, also suggested by Mr. Smith, was by discharges taken from a condenser charged by the conductor of the cable; the second by an electrometer reading, which could compare the potential of the cable with that of each of the 10,000 subdivisions of a slide similar to that used on shipboard. The battery producing the current through coils of the slide was on shore also maintained constant, or corrected by observations on a special galvanometer. By these arrangements the observer could obtain, in a simple form, the various elements required for the immediate calculation of the distance of a fault, had one occurred.

The speaking arrangements were also modified. Charges were not actually withdrawn from the cable, or put in at the shore. The withdrawal of a succession of charges would have produced an appearance alarmingly like a fault. Mr. Varley suggested the use

of a condenser attached to the cable on shore by which he induced slight positive or negative charges, which transmitted the signals to the 'Great Eastern.' He, as it were, instead of at each signal withdrawing a few drops of fluid from our typical pipe, pushed the water a little way back in it, or pulled it a little way on, and signalled by these impulses without withdrawing one drop of the fluid. When messages were being received on board the 'Great Eastern' they simply caused the slight necessary oscillations in the marine galvanometer (an invention of Sir William Thomson's, dating June, 1857), which were insufficient to disturb the insulation test. When the signals were being sent from the Great Eastern, the rush of current in and out of the cable would have disturbed the galvanometer unduly, so it was shunted; that is to say, a part of the current was derived by a little sliding arrangement,—at the end of each word the slide was moved, and a perfect insulation test made. These various practical improvements can only be understood by professional men, but the leading idea of Mr. Willoughby Smith's plan may be grasped by all. The arrangements worked as well in practice as they were admirable in theory. Fortunately no fault occurred.

When a fault does occur, stopping the cable is a very trying and hazardous proceeding. It can only be done gradually. The ship is perhaps running at six miles per hour, or a mile in ten minutes. She will not lose her impetus for a considerable time, even if the engines are reversed; and when the ship is stopped, the cable cannot be instantly checked,—if it were, the strain would rapidly become far too great for it to bear. The twelve or fifteen miles which lay straight on the inclined water-plane, as before described, would quickly fall into the common catenary curve, of which the whole weight would have to be borne ultimately by the cable at the ship's stern; for when the cable ceases to sink, the resistance of the water ceases to buoy it up. The strain caused by a flat catenary of this length is enormous; thus, if in a depth of two miles only ten horizontal miles intervened between the ship's stern and the point where the cable lay on the ground, the strain due to the catenary would, with the Atlantic Cable, be fourteen tons. In practice, therefore, the cable is generally restrained by such a force as is thought safe, and then allowed to run out until it lies in a catenary short enough to produce only this small strain, or if the cable must be held, the ship must go astern over the cable. When the foul flakes occur-

red during the 1866 Atlantic expedition, the *Great Eastern* was stopped in two minutes after the signal was given, and only 130 fathoms of cable payed out during that time. The only time which can be safely saved is the time between the occurrence of the fault and the alarm; and, secondly, between the detection of the fault and the decision of the electrician as to its probable nature and position. The arrangements of 1866, in both these respects, were greatly in advance of all that had been previously attempted.

By far the most remarkable recent achievement in submarine engineering was the recovery of the 1865 Atlantic Cable from a depth of two miles. Cables obviously could be laid in deep as in shallow water—this was a mere question of mechanical arrangement,—but very few persons possessed an imagination sufficiently hardy to allow them even to conceive the possibility of recovering a rope which had sunk to the bottom of the Atlantic Ocean. It is not true, as is now frequently asserted, that no one but those engaged in the expedition had any hope of success; for so soon as it appeared from the attempts made in 1865 that the cable could be hooked, Mr. Henley, Mr. Fleeming Jenkin, and a little later Mr. Latimer Clark, publicly expressed their conviction of the probable success of the undertaking; but it is certain that the public, and some even of the directors of the companies concerned, entirely disbelieved in the possibility of success, and put no faith in the assurances given, that the cable really had been found in 1865. Success had attended similar attempts in considerable depths—this was known to engineers,—and calculation showed that what had been done in 600 fathoms by Mr. Henley was possible in 2000 fathoms. Still the greatest credit must be given to Mr. Canning, now Sir Samuel Canning, for his courage in making the attempt in 1865. Few men would have had the nerve to begin an apparently hopeless search at the very moment of failure in a great but comparatively simple undertaking. The admiration is due not so much to the means adopted either then or in 1866—they were simple enough,—but to the resolution which prompted the attempt at a moment of great depression. The result will have, or ought to have, a greater effect in promoting the establishment of deep-sea cables than the successful submersion of a dozen cables across the Atlantic. It had been thought and said that men sharing the risk of a deep-sea cable were embarked in a desperate or gambling venture; one accident, and

their money was irretrievably lost. This view had been especially advocated by Mr. Francis Gisborne with great show of truth. He contended, and many approved of his opinions, that it was madness to venture across a deep sea, when a cable could be laid in shallow water, simply because in shallow water the cable could always be repaired, whereas in deep water they could not, and one fault involved the loss of the whole capital embarked. This argument, if not entirely swept away, is very much weakened. Deep-sea cables are no longer gambling ventures, but legitimate speculations.

Nothing can be simpler than the means by which the result was attained. A grapnel or small anchor with five prongs, hung to the end of a hemp and steel rope two and a half miles long, was slowly dragged along the bottom of the sea across the line where the cable was supposed to be. The strain on the steel rope was watched; sometimes it rose, and sometimes it fell, as the ship went a little quicker or slower through the water, or as the prongs bit more or less deeply into the sand.

Presently the strain rose from 42 cwt. to 80 cwt., and this strain did not again decrease; but, had the ship been allowed to drift further, would have continued to increase. Surely this increase of strain was due to the cable as it lay on the bottom. The ship's head was allowed to come round so as to face the supposed cable; the steel rope was hauled in; the ship brought vertically over this rope. Still the strain increased, instead of decreasing, even when the length of rope still out of the ship could not reach to the bottom, and then those on board knew that the cable hung on the grapnel. If the cable were not there, the strain would decrease as the weight of steel rope hanging to the bow decreased, but an increase of strain surely proved that more and more weight was being lifted as the grapnel approached the ship, and what conceivable object could produce this effect except the cable, of which a greater and greater length was every minute being lifted from the bottom? This was the reasoning which, in 1865, proved to all on board that really on more than one occasion the cable had hung upon the grapnel. It is needless to say much of the failure to bring the cable to the surface—a failure caused by weak shackles and insufficient machinery,—but it is quite worth while to attend to the reasoning of many persons who, in 1865, wrote to prove that, even if the cable were found again, it could not possibly be brought to the surface by mere hauling. The argument used was, that such an enormous length of cable must be



lifted, stretching east and west on either side of the grapnel, that it would break under its own weight long before coming to the surface,—as one gentleman put it, there was not a sufficient length of cable to reach to the surface. This argument had a certain amount of truth in it, but those who urged it did not generally take the trouble to make accurate calculations, and some made erroneous calculations. Stretch a piece of fine chain, 100 inches long, across a floor, lay it straight, and fasten down the ends; try to raise it in the middle, and you will find that, unless it has been pulled very taut indeed, it will rise an inch or two without difficulty. Even when a cable is supposed to be laid taut, it can be raised to a surprising distance; but the 1865 Atlantic Cable was not so laid; it contained 12 per cent. of slack cable; that is to say, 112 miles of cable lay on about 100 miles of ground. Now, lay the 112 inches of chain on 100 inches of floor and fasten the ends as before. The middle of the chain can now easily be raised  $21\frac{1}{2}$  inches from the ground. The chain will then hang on each side of the point of suspension in catenary curves; the weight supported by the string used to lift the chain will simply be the weight of the chain that is off the ground; the strain on the cable at the point of suspension will be equal to  $83\frac{1}{2}$  inches of chain. This strain is less than the whole weight of the cable lifted, so long as the angle made by the chain at the grapnel is less than 120 degrees, as will always be the case when more than 6 per cent. of slack exists; it is a minimum, and equal to half the weight lifted when the cable hangs vertically down on each side of the grapnel, or when the slack is infinite. The more the slack the less the strain, for less cable will be lifted before the grapnel reaches a given height, and the angle at the grapnel will also be more favourable. With 12 per cent. slack, nearly  $9\frac{3}{4}$  miles must be lifted from the ground to reach to a height of two miles. The weight of Atlantic Cable so lifted would be about  $6\frac{3}{4}$  tons; the strain on the cable near the grapnel less than  $5\frac{1}{2}$  tons. As the cable would bear  $7\frac{3}{4}$  tons, it was clearly possible to lift it by mere hauling. Moreover, the strain at the bottom would in this case be four tons, tending to pull in more slack from either side, and thus diminish the whole length lifted and consequent strain. By increasing the length of our experimental chain on the floor, and omitting the fastenings at the end, which in the actual cable only exist as friction in the sand, this effect may be clearly seen, and if, instead of tying the chain to the string used to lift it, the exper-

imenter will fish for the chain from a table with four bits of wire, bent into a fish-hook shape, with their shanks bound together, making a mimic grapnel, the illusion will be complete, and the dredger will be surprised to find with what certainty he can hook the cable on a moderately smooth carpet. In 1866 the cable was once fairly hauled to the surface by mere brute force. Calculated from the weight ( $6\frac{1}{2}$  tons) then on the grapnel,  $9\frac{1}{4}$  miles of cable must have been hanging by the rope. The catenary formed was such as to require 15 per cent. of slack. The strain at the bottom, of about  $3\frac{1}{2}$  tons, had therefore pulled in an extra three per cent. along the sand on either side. The strain on the cable was about  $4\frac{1}{2}$  tons, but with this strain, or little more, it parted shortly after being brought to the surface, and before, owing to rough water, the necessary stoppers could be fixed to it from the ship. This simply affords another instance of the very well known fact that no engineer should ever depend on obtaining, at all points, the full theoretical or experimental strength of a cable or other structure. There must be a margin. The cable was finally secured by the plan recommended almost unanimously by all who had experience in similar undertakings. Suppose the chain on the floor laid too taut to come up to the level of the table without breaking; if we with a pair of nippers cut the chain a few feet to our right, a little will slip over the grapnel, the two ends will hang down vertically, and we shall easily land our prize. Just so when the 'Great Eastern' had hold of the cable. She directed the 'Medway' to find it, and lift it three miles nearer to America, she then told the 'Medway' to haul away as fast as she could to break the cable, and the 'Great Eastern' hauled in more slowly, but fast enough to keep hold of the cable with her own grapnel. When the 'Medway' got the cable within 400 fathoms of the surface, it broke at her grapnel. The end fell down and the loose bight was easily hauled on board by the 'Great Eastern.' The strain on this occasion was six tons. Owning probably to the hemp covering, the cable did not slip along the grapnel after being cut by the 'Medway.' The only chance of failure was that the cable might have rusted so much that, even when hanging vertically, it could not bear its own weight in two miles of water. On the contrary, little or no signs of rust were observed, and there is no reason to suppose that the 1865 cable had materially lost strength during its year of submersion. Considering the perfect success of this simple method of recovering the cable, it really is unnecessary

to discuss the many ingenious plans suggested; probably the use of a holdfast grapnel in one ship, and a cutting grapnel in the other, would avoid a few mischances; but it is clear that even these appliances are unnecessary. A few accidents from broken chains, weak swivels, stoppers that slipped, bent grapnel-prongs, etc., did occur, and always do occur, even when cables are repaired in shallow water, and, indeed, the repairs of cables in the English or Irish Channel often last longer than the three weeks occupied in recovering the Atlantic Cable. A rocky bottom causes more difficulty and delay than two thousand fathoms of water.

The cable, when recovered, proved perfect; and, on the 2d of September, Sir Samuel Canning telegraphed to Sir Richard Glass, the able manager of the contracting company, that he had much pleasure in speaking to him through the 1865 cable. It was a noble triumph, well earned. The 1865 cable was completed on September 8, 1866. It lies about thirty miles north of the 1866 cable. Those who wish to learn more of the history of this enterprise will find accurate and clear information in *The Atlantic Telegraph*, by W. H. Russell, LL.D., illustrated by R. Dudley; and in the diary of Mr. Deane, the secretary of the Anglo-American Telegraph Company, published in the *Times*.

The success of the Atlantic Cable was not gained by the effort of a single genius, but resulted from the co-operation of many minds, and divers kinds of men. Some have followed the undertaking from first to last; for instance, Mr. Cyrus Field's unflinching faith has carried him on from first to last as an advocate whose zeal never flagged. Sir Richard Glass was a member of the firm of Glass and Elliott, which made half of the first cable, and he is the manager of the Company which has successfully completed the task. His work is known to all who practically were connected with the undertaking. He is the recognised chief of all, and willingly recognised. Sir Samuel Canning and Mr. Clifford accompanied the first expedition. Sir Wm. Thomson was on board the 'Agamemnon' in 1858, and has freely spent time and money in forwarding a work in which he saw a means of worthily employing the powers of a mathematician, the experimental skill of a naturalist, and the inventive faculties of a man of genius. His name has already been frequently mentioned as first to make this and that invention or improvement; and not only has he reaped with his own hand a meet harvest of scientific discovery, but he has the satisfaction of having prompted

others whose work has been a supplement to his own; and indeed he may be said to have founded a new school of practical electricians in England. Mr. Varley came later into the field, but he too worked hard, and his assistance during the long period of depression from 1858 to 1865, and at Valentia during the last expedition, together with his additions to the testing and speaking instruments, give him strong claims. Mr. Willoughby Smith, of whose beautiful system of testing it is difficult to speak too highly, has only lately been placed in high command, but indirectly, as electrician to the Gutta-Percha Works, from first to last he has helped, and helped effectually, in improving the materials employed. Mr. Chatterton, the manager of those works, should not be passed by in silence. To these must be added the well-known names of Captain Sir James Andersen and Commander Moriarty, C.B., as well as those of the early pioneers, Sir Charles Bright, Mr. Whitehouse, and Mr. de Sauty, and last, not least, the Directors and Officers of the Atlantic Cable Company, the Anglo-American Company, and the Telegraphic Construction and Maintenance Company. The difficulties these gentlemen have had to contend with do not admit of being scientifically stated. They can indeed only be known within a very narrow circle, but those who have been similarly placed, and have had to administer the affairs of a company heavily involved in a dangerous undertaking, requiring continually large supplies of fresh capital, will be able to guess at the work and anxiety they must have undergone. A pair of Baronetries among them all is really a moderate reward.

But now that the rewards are distributed, and the cables are laid, how are they being used? Alas! very little as yet. Perhaps no one even believes that a long submarine cable ever will be laid, and so preparations are never made to meet it. The Persian Gulf Cable was laid nine months before the land lines were completed which allowed it to transmit messages. Until very lately they were so wretchedly bad, or badly managed, that messages often spent a week in the overland journey, and arrived so much out of condition as to be unrecognisable by their friends.

The Atlantic Cables end at Hearts-Content, Newfoundland, and the journey of the messages often ends there too. It is said that up to the beginning of November, since the line was opened, the lines from Newfoundland to America have been interrupted for thirty days, or nearly one third of the whole time. Through large tracts of desolate country a single wire was expected to

do all the work, and no due arrangement for its management seems to have been made. The short submarine line from the island to the mainland, laid in 1856, and eighty-five miles long, was out of order when the 1866 cables were completed, and so we have hitherto reaped comparatively little benefit from those cables, looked on as a commercial speculation. The high price of £20 for a twenty-word message, only recently lowered to £10, has been justified by the fact, that if many messages had been obtained from the public, they really could not have been sent. So in practice one or two hours' work per diem has been sufficient to send on one cable all the American and European Continents had to say in a hurry. This cannot last, but it is almost amusing as a commentary on the lively disputes which occurred on the power of the cables to transmit a large amount of work. In time the outlet from Newfoundland will be completed, and the cables will then surely be flooded to such an extent as to test their utmost capabilities.

Engineers and electricians, half-alarmed at their own audacity, gave certificates that seven or eight words per minute might be sent along the new cables. New and complex instruments were devised to insure even this result, and now eighteen or twenty words per minute have been obtained; with the omission of many of these inventions, twelve words per minute is the fair average speed. Nevertheless, the engineers and electricians were not to blame. On the contrary, they deserve praise for their moderation. To explain how their estimate was formed, a sketch of the theory of the transmission of submarine signals is required, and here again Sir William Thomson must be named as the first to state that theory, and draw the main conclusions from it. In a letter to the *Athenæum*, dated November 1, 1857, Sir William Thomson pointed out, in opposition to Mr. Whitehouse, then electrician to the Atlantic Telegraph Company, that the number of words which in a given time could be sent through a long submarine cable varied inversely as the square of the length of that cable; that when the length of a cable was doubled, only one quarter the number of messages per diem could be sent through it. In a paper published in the Proceedings of the Royal Society, Sir William Thomson gave the complete theory, showing that on all lines a limit existed to the speed of transmission, and giving an estimate of the probable speed through the 1858 Atlantic Cable as three words per minute.

The speed of electricity used to be given as 288,000 miles per second, but in reality

Professor Wheatstone's beautiful experiments only proved that this speed might in given circumstances be attained. Electricity seems to have no proper speed, in the usual sense of the word. The speed depends in each case on the condition of the conductor,\* and may on certain conceivable conditions be treated as infinite, though we have no proof that the laws now known hold good up to or nearly up to this limit. When the Valentia end of the Atlantic Cable is joined to the signalling battery, a current rushes into the cable without any perceptible loss of time, but no effect whatever can be perceived in America for at least one-tenth of a second; after say fifteen-hundredths of a second, the received current begins rapidly to increase, according to a definite law, and if the battery contact at Valentia is continued, the current entering the cable there, and that flowing out of the cable at Valentia, will be sensibly equal after say two and a quarter seconds. After this the currents would remain equal so long as the battery remained in action. When the battery contact is broken at Valentia, and the cable put to earth, the current flows on at Newfoundland for say one-tenth of a second, as if nothing had happened; it then begins rapidly to decrease, and sensibly ends say two and a quarter seconds after the contact was broken.

Thus the current arrives in gradually increasing waves, and dies out in a precisely similar manner. (The numbers given are not the results of direct experiment, but are probably not far from the truth.) On an average three waves, or arrivals of waves, are required to indicate a letter of the alphabet, and five letters are required for each word, so that if on each occasion the wave had to rise to its maximum and fall to its minimum, each letter would require twelve seconds for its completion, and one word per minute only could be sent. With the ordinary Morse instruments used on land and short submarine lines, probably this result

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\* This fact, and the increased retardation observed in underground wires, and therefore in submarine cables, is guessed, or rather foreseen, in a very curious proposal for an electric telegraph, by Francis Ronalds, published in 1823, containing an account of experiments made in 1816, long before the days of Gauss or Cooke and Wheatstone, before even the discoveries of Oersted and Ampère, which have rendered our present system of telegraphy possible. The writer is indebted to Mr. Latimer Clark for the knowledge of this fact. Mr. Ronalds' proposal, based on actual experiments through eight miles of wire, deserves to be better known than it is. His book is called *Descriptions of an Electrical Telegraph*, and was published for R. Hunter, 72 St. Paul's Churchyard, in 1823.

would nearly be the limit of the working speed. On the Malta-Alexandria Cable, which has a larger core, and one, therefore, better adapted for speed than the Atlantic Cable, only 3.18 words per minute were obtained through 1330 knots. Calculated from this, and allowing for the difference of the cores, the speed on the Atlantic Cables would be little more than  $1\frac{1}{2}$  words per minute; and he it remarked that until the present year no other instruments than these ordinary Morse instruments were in practical use on submarine lines. Our engineers were therefore bold when they promised seven or eight times this speed by means of new instruments. Moreover, the New Atlantic, even allowing for the difference in length and in copper, can only be about two and a half times as good a speaking instrument as the 1858 Atlantic, on which only two and a half words per minute had been obtained.

In order to produce a succession of distinct and legible signals, it is not necessary that the wave should reach its maximum and fall to its minimum at each signal. If the sending battery contacts are changed or reversed before the full height of the wave is reached, the wave is not obliterated, it is simply diminished; if battery contacts, alternately with one and the other pole of the battery, succeed one another with considerable rapidity, say three reversals every second, or ninety dot-signals per minute, the waves will be reduced to say 10 per cent. of their maximum; but if we can render these little waves visible, they may be interpreted as legible signals. The old Morse system, which simply indicated a blunt Yes or No, could not show these little waves, or follow them in any way. Sir William Thomson's reflecting galvanometer does render these little waves legible, even when they are no larger than one per cent. of the maximum current. The received current deflects a tiny magnet to and fro. A little mirror swinging with the magnet reflects a spot of light on to a distant scale, where by its oscillations the spot of light indicates movements of the magnet too small to be directly seen. The little swinging magnet follows every change in the received current, and every wave, great or small, produces a corresponding oscillation of the spot of light on the scale. These little oscillations, produced in due order, are easily read by a practised clerk,—no one knew how easily. The sending arrangements were designed to produce perfect regularity in these little waves, making them as sharply defined as possible; but just as by a practised eye handwriting can be read in which there is no single clearly formed letter, so it has been

found that a clever clerk will instinctively, as it were, disentangle most irregular oscillations of this little spot of light into the letters and words they should represent, and from this cause the greater part of the sending gear has been found unnecessary, and yet the bold estimate of eight words per minute has been exceeded. The addition of a single simple little instrument allows four times the number of words to be sent through the Atlantic that could be sent through the Malta-Alexandria Cable, of little more than two-thirds the length. Here, then, is at least as great an advance as in the other branches of submarine telegraphy. In future long cables the speed may be calculated on this new basis, which has long been advocated by a few, but which had not received practical confirmation till now. The speed at which messages can be sent through a given length of cable is simply proportional to the quantity of copper and gutta-percha used, provided the relative proportions of these materials remain unchanged, as is now practically true in most cases. The new experiment would therefore allow the engineer to adopt a core of one-eighth the weight which he could have adopted upon the old system of telegraphy to obtain the same speed; or if he be not bold enough to adopt so small a core as this would sometimes lead to, he may at least choose the smallest core which on mechanical grounds he thinks safe to adopt. Here we may catch a glimpse of possible cheap cables hereafter.

So long as the cable was coiled on board the 'Great Eastern,' it was not possible to transmit more than five or six words per minute through it, even with the best appliances. The difference between a coiled cable and a straight one, as a means of signalling has long been known, and that difference appeared from Mr. Jenkin's experiments on the Red Sea Cable (Transactions of the Royal Society, 1862) to be possibly great enough to halve the speed, or even reduce it to a still smaller fraction of that obtained on the straight cable; but crucial experiments on this point were wanting. The extra retardation is produced partly by the induction of the current on various parts of itself in neighbouring coils, and partly by the magnetization and demagnetization of the iron sheathing, which forms a sort of huge electro-magnet. The effect produced by the coiling is analogous to giving the electric fluid an inertia, and consequent momentum, an analogy long since pointed out by Sir William Thomson, in a paper by him and Mr. Jenkin on the discharge from a coiled cable, published in *Phil. Mag.*, 1861. A new illustration of this analogy was dis-

covered on board the 'Great Eastern' by Sir William Thomson, in the fact of an oscillating current flowing in and out of the insulated cable when first charged. This phenomenon was described by Mr. Varley in a paper read at the meeting of the British Association this year at Nottingham, and published in the *Athenæum* of the 15th September.

The signalling arrangements on board ship and on shore present this peculiarity, that there is no voltaic circuit. The current is received at Valentia in a Leyden jar or condenser, which acts as a sort of elastic reservoir. When receiving, it is alternately charged by the cable, and discharged back into the cable; while the galvanometer placed between the condenser and the cable indicates the alternate forward and backward tide in the current. Similarly when Valentia wishes to send signals, it charges the condenser positively or negatively by induction from the battery, and thus causes corresponding movements in the charge of the cable. This arrangement, already alluded to in the testing arrangements, is due, we believe, to Mr. Varley, and prevents to a great extent the action of earth-currents, which would otherwise be found troublesome with so sensitive a receiving instrument as the mirror galvanometer. Much has been said concerning these earth-currents, and some people thought they would render signalling across the Atlantic impossible.

Different parts of the earth and sea are found to be at different electric potentials. One part is electro-positive or electro-negative to another. There is, that is to say, the same difference between two parts of the earth that exists between the two poles of a battery. If, then, these two points are joined by a wire, a current will flow through that wire as if from a battery, and this current is termed an earth-current, to distinguish it from a current produced by an ordinary voltaic battery. This difference of potential between two given spots, such as Newfoundland and Valentia, is not constant, but continually varies. So does the current it produces. The current, and the variations in the current, interfere with the signalling current, disturbing the distinctness of the signals. When no voltaic circuit exists, no direct current will flow from one end of the cable to the other, except that caused by the discharges into and out of the condenser; but a change in the potential of either station will still have some disturbing effect by changing the charge in the condenser. When very rapid changes take place in the electric condition of the centre, a magnetic storm is said to be taking place, and this, on all lines,

will occasionally put a stop to signalling. Very little is yet known as to the cause of earth-currents or their laws. The electromotive force producing them does not seem to increase with the distance between the two ends of the line after the first few miles. No greater force than that due to ten ordinary Daniell's cells is reported by Sir W. Thomson and Mr. Varley to have been observed at any time between the two ends of the cable. Much the same may be said of the Malta-Alexandria Cable; but Mr. Varley has spoken of a force equal to 400 cells on short land lines in England. Thus submarine lines appear to have in this respect an advantage over air lines. The latter are further subject to induction from changes in the atmosphere, producing effects similar to earth-currents. The conducting mass of the sea should screen submarine circuits from all these effects; but Mr. Varley has informed the writer that currents were observed from the Atlantic which seemed to be of this nature. One most singular phenomenon was also communicated to the writer by Sir W. Thomson and Mr. Varley. Owing to changes in the potential of the sea, the capacity of the cable for a statical charge varied. The immense Leyden jar formed by the cable at times therefore poured out a current at one end, while the other was insulated, giving apparently more than infinitely good insulation. Not only did the battery used to test insulation then fail to force any current through the gutta-percha of the insulated cable, but a current was actually forced back on the battery, as if coming through the gutta-percha into the cable. From this cause, even if the Atlantic Cables were joined in a metallic circuit, continual currents would fluctuate to and fro between them, owing to changes in the difference of potential of the sea in their respective tracks, thirty miles apart. The two cables afford an unrivalled opportunity of studying earth-currents, about which really little is known; and it is to be hoped the opportunity will not be neglected. There is not the slightest reason to fear that they will prove any obstacle to the transmission of messages through any submarine cable, of whatever length it may be. One method of avoiding all disturbance from earth-currents is to use so powerful a battery as to overpower their effects; but this plan is not to be recommended, since the action of a powerful battery has been known to change small faults into great ones, and though not even a small fault is believed to exist in either Atlantic Cable, it is well to avoid so powerful a decomposing agent as is furnished by a large voltaic battery. 400 cells were

used in 1858. For the signals sent in 1866, 12 cells are sufficient, but 20 or 30 is the number in daily use. Mr. Latimer Clark sent signals through the two cables joined in one, being a circuit of 3754 geographical miles, with one small cell formed in a thimble. In connexion with the subject of signalling, it is interesting to remark that perhaps Sir William Thomson's connexion with the Atlantic Telegraph Cables was due to a controversy between him and Mr. Whitehouse on the subject of signalling; the letters are published in the *Athenæum* from August to November 1856, and are extremely curious. Mr. Whitehouse misinterpreted some careful experiments, and remarks in one place that to lay such a cable as he thought Sir William Thomson's theory demanded, would require Mr. Scott Russell's 'Leviathan.' It is needless to add that subsequent experiment has confirmed every part of Sir W. Thomson's theory, although the constants he used have been somewhat modified by experience.

Attention has so far been chiefly directed to the Atlantic Cables, because in connexion with these almost every late improvement has been adopted or invented. Lines in shallow water remain much what they were in general construction ten years since. Those of later design are heavier on the average than the earlier cables, for experience has shown that a saving of weight and strength results in great ultimate loss. The average life of a shallow water cable, weighing less than two tons per mile, is about five years, whereas no limit can as yet be assigned to the life of cables weighing eight or ten tons to the mile. The iron wires are now almost always galvanized, and frequently covered with hemp, and Bright and Clark's silicated bituminous compound, which seems very efficiently to protect the cables from rust, and to prevent broken wires, during submersion, from fouling any part of the machinery, a frequent occurrence some years since, producing what was called a brush, formed by the one broken wire remaining on board in a constantly increasing coil or tangle round the axis of the rope, while the rest of the cable went overboard. The Persian Gulf Cable made by Mr. Henley, and tested and laid by Messrs. Bright and Clark for the Indian Government, under the superintendence of Colonel Stewart, was thus covered. The excellence of this cable, 1176 miles long, laid near Kurrachee, in a sea with the temperature at the bottom of  $24.2^{\circ}$  C., and at the top of  $26^{\circ}$  C. is a proof that gutta-percha may, with due precaution, be used in tropical climates.

The gutta-percha resistance per mile of

this cable varies from 575 to 268 millions of British Association units per mile, according to the temperature of the bottom of the various sections. It was laid from sailing vessels towed by a steamer. The diameter of the main cable, covered with compound, is  $1\frac{1}{8}$  inches, and its weight about 3.7 tons per mile. The Lowestoft-Norderney Cable, 240 miles long, laid in September last, from England to what was Hanover, is the heaviest, on the whole, yet laid. It weighs  $10\frac{1}{2}$  tons per mile, is 2 inches in diameter, contains four insulated conductors, is covered with Bright and Clark's Compound, and would bear a strain of twenty tons. It has 20 miles of shore end, each mile of which weighs 20 tons, and would bear a strain of 40 tons. The insulation resistance of each mile, as it lies in the North Sea, is 1100 millions of British Association units, and the four wires are remarkably uniform. This cable was laid for Messrs. Reuter's Telegram Company, under the superintendence of Messrs. Forde and Fleeming Jenkin. The contract was let to the Telegraph Construction Company, and the cable made and laid by Mr. Henley. The England-Holland Cables are shorter examples of equally colossal proportions. There are now seven cables at work between England and the Continent, and three between England and Ireland. The Malta-Alexandria Cable, 1330 miles long, laid for Government in 1861, under Mr. Forde's superintendence, by Messrs. Glass, Elliott, and Co., also deserves mention. Although not designed for shallow water it has done good service; but the frequent interruptions which occur will serve as a warning not again to use a cable weighing less than two tons per mile in shallow seas. Those who wish for fuller information concerning the less important lines, may consult the references given in the course of this article. The most important fact to be stated about shallow sea lines, is that the Dover-Calais Cable, laid sixteen years ago, is still working, and likely to continue to work for years to come.

It is extremely difficult to obtain accurate statistics as to the number of miles of cables laid, lost, and now at work. Many are in the hands of distant Governments, who give no information; and some are so frequently under repair, that it is difficult to know in what category to place them. In 1862, in Mr. Jenkin's report to the Jurors of the Great Exhibition, 5345 statute miles of cable, and 9456 miles of gutta-percha wire, were said to be in working order; 9406 miles of cable were classed as having been successful for some time, but not then working; 557 miles were classed as



total failures. These numbers were avowedly mere approximations.

Mr. Francis Gisborne published statistics in 1865, in which he put the numbers for working and new-working cables at 5066 and 11,261 statute miles respectively. Dr. Russell gave 6842, and 9407, as the length of cables at work and abandoned. Since then 3754 miles have been added to the successful list by the Atlantic expedition. The Gutta-percha Company claim now to have supplied insulated cable for 12,100 miles of cable, which are still at work. Whatever the actual numbers are, it is incontestable that a large proportion of lines laid have failed from time to time. The Red Sea, and Batavia-Singapore Cables, upwards of 4000 statute miles long, failed from their want of weight and strength; they rusted rapidly, and could not be repaired when faults appeared, or when they chafed through; or rather the expense of the continual repairs was such that they were abandoned, perhaps somewhat prematurely. The failures of some deep-sea cables have in all probability been due to lightning. An unaccountable apathy has in many cases led to the neglect or actual removal of the lightning dischargers attached to submarine lines, and the writer has seen neglected dischargers with points fused and burnt away, proving that the line had been struck repeatedly. Other failures have been attributed to the tautness of the cable when laid, to friction at the bottom, to volcanic action, etc.; but not much is known about these causes, which are rather hypothetical than proved. Neglected faults have certainly, in some cases, been much enlarged, by the use of more and more powerful batteries, added by ignorant clerks.

These failures need alarm no one; they simply prove, what should be known without proof, that there is a real difference between ignorance and knowledge, between care and neglect; and that supervision after submersion is not less necessary than during manufacture. The main object of this article has been to show that the success obtained in late years, as compared with early failures, is due to no chance, but to a real advance in every branch of Submarine Telegraphy. If the reader does not understand or believe in this advance, the writer has failed in his object. He prefers to think that he has shown good reason for believing that the success is likely to be permanent. Much might be written on the proposals for still further improvements, real and imaginary. Mr. Hooper has succeeded in preparing india-rubber, so as to be appar-

ently permanent, while it certainly surpasses gutta-percha in all the electrical properties which are required for the insulation of cables. The Indian Government has taken the initiative in employing this material, which is eminently suited for tropical climates. The other preparations of india-rubber have very generally been found subject to decay; and various newly proposed materials, such as parkesine and balata, can hardly be said to have been fairly brought before the public.

Messrs. Siemens have employed for some portion of their lines lately laid with success in the Mediterranean, a very novel form of cable, formed of hemp bound with strips of copper, which they believe will be much more permanent than the old-fashioned cables. The forms proposed, but not yet tested, are very numerous, and little is known of their merits. The cost of an experiment is so great that engineers hesitate to recommend even what they believe to be well worth a trial. It is certain that the old forms answer well, but it is equally certain that their expense will preclude their adoption, except on the main lines. A cheap light cable, durable in deep water, would lead to an immense extension of the telegraphic system. It is by no means certain that a simple gutta-percha-covered wire would not answer as well as the most elaborate cable. However this may be, the next advance must be towards cheapness;—efficiency is attained.

The importance of telegraphic communication is often claimed on very narrow grounds. The advantages in war and diplomacy are to some extent counterbalanced by very obvious disadvantages. Even the gain to individual merchants admits of doubt. By diminishing risks, telegraphy is sometimes thought to diminish profits. The mere convenience of sending a message quickly is outweighed in many minds by the annoyance of receiving, at all odd hours, scraps of news, often unintelligible from their conciseness. But on the broad ground that with the assistance of the telegraph the wants of one country can be supplied from the excess of another, in little more than half the time required for the purpose without the telegraph, we may claim for that invention a recognition that it is useful, in the sense that free trade, good roads, or fleet ships are useful. The measure of that good is a problem in political economy which it is not now our business to solve; it is certainly out of all proportion with the price paid for the information sent. Up to the present time, full advantage has not been taken of the power we possess. From a want of organization

and some political difficulties, we cannot at this moment send a message to any distant part of the world with a certainty that it will be delivered without considerable delay and probable mutilation. Mr. Reuter, to whom we owe the organization of the despatch of public news, has begun to organize a system by which, in time, the great capitals of Europe may really be placed in instantaneous communication. A Parliamentary Committee has been considering proposals of a similar kind extended to the East; but, meanwhile, a message sent through the Atlantic Cable may be delayed five or six days in the wilds of Nova Scotia, and mutilated messages continue to arrive after a fortnight's journey from India. So long as this is the case, no calculation can be made of the employment which would be found for our great submarine cables if worthily worked. But the fact that much remains to do, even after the Atlantic Cable has been laid, need not prevent a just pride in a really great victory, achieved, not by chance, but by a knowledge resulting from the patient efforts of many minds for many years.

#### LIST OF CABLES.

##### *In working order.*

1. Dover and Calais. 2. Denmark, across the Belt. 3. Dover and Ostend. 4. Portpatrick and Donaghadee. 5. Portpatrick and

Whithead. 6. Sweden and Denmark. 7. Corsica and Sardinia. 8. Newfoundland and Cape Breton. 9. Prince Edward's Island and New Brunswick. 10. Ceylon and India (Mainland.) 11. Italy and Sicily. 12. England to Holland (Hague). 13. South Australia and King's Island. 14. Sweden and Gothland. 15. Folkestone and Boulogne. 16. Malta and Sicily. 17. Barcelona and Mahon; 18. Minorca and Majorca. 19. Iviza and Majorca. 20. St. Antonio and Iviza. 21. Malta and Alexandria. 22. Newhaven and Dieppe. 23. Pembroke and Wexford. 24. England (Lowestoft), Holland (Zaanvoort). 25. Sardinia and Sicily. 26. Persian Gulf (Kurrachee, Mussendom, Bushire and Fao). 27. Otranto and Avlona. 28. Algeria (Lacalle and Biserta), Sicily (Marsala). 29. Sweden and Prussia. 30. River Plate (Buenos Ayres and Monte Video). 31. Corsica and Leghorn. 32. England and Newfoundland (Valentia and Trinity Bay). 33. do. (do. and do.) 34. England (Lowestoft), Hanover (Norderney). 35. Cook's Strait (New Zealand).

##### *Failures.*

1. Corsica and Sardinia. 2. Varna and Balaklava. 3. Red Sea and India (Aden, Suakin, and Kurrachee). 4. England (Cromer) and Denmark (Heligoland). 5. Tasmania and King's Island. 6. Toulon and Corsica. 7. Toulon and Algiers. 8. Singapore and Batavia. 9. First Atlantic. 10. Sardinia and Africa (Cagliari-Bona). 11. Sardinia-Malta, and Malta-Corfu. 12. Greek Islands (Athens, Syria, Scio, Candia, Smyrna).

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